

# Chamomiles

**Botanical: N.O. Compositae**

## Habitat

There are a number of species of Chamomile spread over Europe, North Africa and the temperate region of Asia, but in Great Britain we have four growing wild: the sweet-scented, true Chamomile (*Anthemis nobilis*); the Fetid Chamomile or Stinking Mayweed (*A. cotula*), which has what Gerard calls 'a naughty smell'; the Corn Chamomile (*A. arvensis*), which flowers rather earlier and is noticeable because its ray florets are empty and wholly for show and possess no sort of ovary or style, and fourthly, the Yellow Chamomile, with yellow instead of white rays, which is found sometimes on ballast heaps, but is not a true native.

## Chamomile, Common

**Botanical: Anthemis nobilis (LINN.)**

**Family: N.O. Compositae**

## Synonyms

Manzanilla (Spanish). Maythen (Saxon).

## Parts Used

Flowers and herb.

Chamomile is one of the oldest favourites amongst garden herbs and its reputation as a medicinal plant shows little signs of abatement. The Egyptians revered it for its virtues, and from their belief in its power to cure ague, dedicated it to their gods. No plant was better known to the country folk of old, it having been grown for centuries in English gardens for its use as a common domestic medicine to such an extent that the old herbals agree that 'it is but lost time and labour to describe it.'

## Description

The true or Common Chamomile (*Anthemis nobilis*) is a low-growing plant, creeping or trailing, its tufts of leaves and flowers a foot high. The root is perennial, jointed and fibrous, the stems, hairy and freely branching, are covered with leaves which are divided into thread-like segments, the fineness of which gives the whole plant a feathery appearance. The blooms appear in the later days of summer, from the end of July to September, and are borne solitary on long, erect stalks, drooping when in bud. With their outer fringe of white ray-florets and yellow centres, they are remarkably like the daisy. There are some eighteen white rays arranged round a conical centre, botanically known as the receptacle, on which the yellow, tubular florets are placed—the centre of the daisy is, however, considerably flatter than that of the Chamomile.

All the Chamomiles have a tiny, chaffy scale between each two florets, which is very minute and has to be carefully looked for but which all the same is a vital characteristic of the genus *Anthemis*. The distinction between *A. nobilis* and other species of *Anthemis* is the shape of these scales, which in *A. nobilis* are short and blunt.

The fruit is small and dry, and as it forms, the hill of the receptacle gets more and more conical.

The whole plant is downy and greyishgreen in colour. It prefers dry commons and sandy soil, and is found wild in Cornwall, Surrey, and many other parts of England.

Small flies are the chief insect-visitors to the flowers.

### **History**

The fresh plant is strongly and agreeably aromatic, with a distinct scent of apples - a characteristic noted by the Greeks, on account of which they named it 'ground-apple' - *kamai* (on the ground) and *melon* (an apple) - the origin of the name Chamomile. The Spaniards call it 'Manzanilla,' which signifies 'a little apple,' and give the same name to one of their lightest sherries, flavoured with this plant.

When walked on, its strong, fragrant scent will often reveal its presence before it is seen. For this reason it was employed as one of the aromatic strewing herbs in the Middle Ages, and used often to be purposely planted in green walks in gardens. Indeed walking over the plant seems specially beneficial to it.

'Like a camomile bed -  
The more it is trodden  
The more it will spread,'

The aromatic fragrance gives no hint of its bitterness of taste.

The Chamomile used in olden days to be looked upon as the 'Plant's Physician,' and it has been stated that nothing contributes so much to the health of a garden as a number of Chamomile herbs dispersed about it, and that if another plant is drooping and sickly, in nine cases out of ten, it will recover if you place a herb of Chamomile near it.

### **Parts Used Medicinally**

The whole plant is odoriferous and of value, but the quality is chiefly centred in the flower-heads or capitula, the part employed medicinally, the herb itself being used in the manufacture of herb beers.

Both single and double flowers are used in medicine. It is considered that the curative properties of the single, wild Chamomile are the more powerful, as the chief medical virtue of the plant lies in the central disk of yellow florets, and in the cultivated double form the white florets of the ray are multiplied, while the yellow centre diminishes. The powerful alkali contained to so much greater extent in the single flowers is, however, liable to destroy the coating of the stomach and bowels, and it is

doubtless for this reason that the British Pharmacopoeia directs that the 'official' dried Chamomile flowers shall be those of the double, cultivated variety.

The double-flowered form was already well known in the sixteenth century. It was introduced into Germany from Spain about the close of the Middle Ages.

Chamomile was largely cultivated before the war in Belgium, France and Saxony and also in England, chiefly in the famous herbgrowing district of Mitcham. English flowerheads are considered the most valuable for distillation of the oil, and during the war the price of English and foreign Chamomile reached an exorbitant figure.

The 'Scotch Chamomile' of commerce is the Single or Wild Chamomile, the yellow tubular florets in the centre of the head being surrounded by a variable number of white, ligulate or strap-shaped ray florets. The 'English Chamomile' is the double form, with all or nearly all the florets white and ligulate. In both forms the disk or receptacle is solid and conical, densely covered with chaffy scales, and both varieties, but especially the single, have a strong aromatic odour and a very bitter taste.

### **Cultivation and Preparation for Market**

Chamomile requires a sunny situation. The single variety, being the wild type, flourishes in a rather dry, sandy soil, the conditions of its natural habits on wild, open common-land, but the double-flowered Chamomile needs a richer soil and gives the heaviest crop of blooms in moist, stiffish black loam.

Propagation may be effected by seed, sown thinly in May in the open and transplanting when the seedlings are large enough to permanent quarters, but this is not to be recommended, as it gives a large proportion of single-flowered plants, which, as stated above, do not now rank for pharmaceutical purposes as high as the double-flowered variety, though formerly they were considered more valuable.

The usual manner of increasing stock to ensure the double-flowers is from 'sets,' or runners of the old plants. Each plant normally produces from twelve to fourteen sets, but may sometimes give as many as from twenty-five to fifty. The old plants are divided up into their sets in March and a new plantation formed in well-manured soil, in rows 2 1/2 feet apart, with a distance of 18 inches between the plants. Tread the small plants in firmly, it will not hurt them, but make them root better. Keep them clean during the summer by hand-weeding, as hoeing is apt to destroy such little plants. They will require no further attention till the flowers are expanded and the somewhat tedious process of picking commences.

In autumn, the sets may be more readily rooted by placing a ring of good light soil about 2 or 3 inches from the centre of the old plant and pressing it down slightly.

### **Chemical Constituents**

The active principles are a volatile oil, of a pale bluecolour (becoming yellow by keeping), a little Anthemis acid (the bitter principle), tannic acid and a glucoside.

The volatile oil is yielded by distillation, but is lost in the preparation of the extract. Boiling also dissipates the oil.

### **Medicinal Action and Uses**

Tonic, aching, anodyne and antispasmodic. The official preparations are a decoction, an infusion, the extract and the oil.

The infusion, made from 1 OZ. of the flowers to 1 pint of boiling water and taken in doses of a tablespoonful to a wineglass, known popularly as Chamomile Tea, is an old-fashioned but extremely efficacious remedy for hysterical and nervous affections in women and is used also as an emmenagogue. It has a wonderfully soothing, sedative and absolutely harmless effect. It is considered a preventive and the sole certain remedy for nightmare. It will cut short an attack of delirium tremens in the early stage. It has sometimes been employed in intermittent fevers.

Chamomile Tea should in all cases be prepared in a covered vessel, in order to prevent the escape of steam, as the medicinal value of the flowers is to a considerable extent impaired by any evaporation, and the infusion should be allowed to stand on the flowers for 10 minutes at least before straining off.

Combined with ginger and alkalies, the cold infusion (made with 1/2 oz. of flowers to 1 pint of water) proves an excellent stomachic in cases of ordinary indigestion, such as flatulent colic, heartburn, loss of appetite, sluggish state of the intestinal canal, and also in gout and periodic headache, and is an appetizing tonic, especially for aged persons, taken an hour or more before a principal meal. A strong, warm infusion is a useful emetic. A concentrated infusion, made eight times as strong as the ordinary infusion, is made from the powdered flowers with oil of chamomile and alcohol and given as a stomachic in doses of 1/2 to 2 drachms, three times daily.

Chamomile flowers are recommended as a tonic in dropsical complaints for their diuretic and tonic properties, and are also combined with diaphoretics and other stimulants with advantage.

An official tincture is employed to correct summer diarrhoea in children. Chamomile is used with purgatives to prevent griping, carminative pills being made from the essential essence of the flowers. The extract, in doses of 10 to 15 grains, combined with myrrh and preparations of iron, also affords a powerful and convenient tonic in the form of a pill. The fluid extract of flowers is taken in doses of from 1/2 to 1 drachm; the oil, B.P. dose, 1/2 to 3 drops.

Apart from their employment internally, Chamomile flowers are also extensively used by themselves, or combined with an equal quantity of crushed poppy-heads, as a poultice and fomentation for external swelling, inflammatory pain or congested neuralgia, and will relieve where other remedies have failed, proving invaluable for reducing swellings of the face caused through abscesses. Bags may be loosely stuffed with flowers and steeped well in boiling water before being applied as a fomentation. The antiseptic powers of Chamomile are stated to be 120 times stronger than seawater. A decoction of Chamomile flowers and poppyheads is used hot as fomentation

to abscesses - 10 parts of Chamomile flowers to 5 of poppy capsules, to 100 of distilled water.

The *whole herb* is used chiefly for making herb beers, but also for a lotion, for external application in toothache, earache, neuralgia, etc. One ounce of the dried herb is infused in 1 pint of boiling water and allowed to cool. The herb has also been employed in hot fomentations in cases of local and intestinal inflammation.

Culpepper gives a long list of complaints for which Chamomile is 'profitable,' from agues and sprains to jaundice and dropsy, stating that 'the flowers boiled in Iye are good to wash the head,' and tells us that bathing with a decoction of Chamomile removes weariness and eases pain to whatever part of the body it is employed.

Parkinson, in his *Earthly Paradise* (1656), writes:

'Camomil is put to divers and sundry users, both for pleasure and profit, both for the sick and the sound, in bathing to comfort and strengthen the sound and to ease pains in the diseased.'

Turner says:

'It hath floures wonderfully shynynge yellow and resemblynge the appell of an eye . . . the herbe may be called in English, golden floure. It will restore a man to hys color shortly yf a man after the longe use of the bathe drynke of it after he is come forthe oute of the bathe. This herbe is scarce in Germany but in England it is so plenteous that it groweth not only in gardynes but also VIII mile above London, it groweth in the wylde felde, in Rychmonde grene, in Brantfurde grene.... Thys herbe was consecrated by the wyse men of Egypt unto the Sonne and was rekened to be the only remedy of all agues.'

The dried flowers of *A. nobilis* are used for blond dyeing, and a variety of Chamomile known as Lemon Chamomile yields a very fine essential oil.

## Chamomile, German

**Botanical:** *Matricaria chamomilla* (LINN.)

**Family:** N.O. Compositae

### Synonym

Wild Chamomile.

**Part Used** Flowers.

The German Chamomile, sometimes called the Wild Chamomile, has flower-heads about 3/4 inch broad, with about fifteen white, strap shaped, reflexed ray florets and numerous tubular yellow, perfect florets. It is frequent in cornfields and so remarkably like the Corn Chamomile (*Anthemis arvensis*) that it is often difficult to distinguish it from that plant, but it is not ranked among the true Chamomiles by botanists because it does not possess the little chaffy scales or bracts between its florets; also the conical receptacle, or disk, on



**German chamomile**  
(*Matricaria chamomilla*)  
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which the florets are arranged is hollow, not solid, like that of the Corn Chamomile. It may also be distinguished from *A. cotula* and *Matricaria inodora*, the Mayweeds, by the lapping-over scales of its involucre surrounding the base of the flower-head not being chaffy at the margin, as in those species. It has a strong smell, somewhat like that of the official Common Chamomile (*A. nobilis*), but less aromatic, whereas the Corn Chamomile which it so closely resembles is scentless.

### Constituents

The flowers of the German Chamomile, though aromatic, have a very bitter taste. They contain a volatile oil, a bitter extractive and little tannic acid.

### Medicinal Action and Uses

Carminative, sedative and tonic. The infusion of 1/2 oz. of the dried flowers to 1 pint of boiling water may be given freely in teaspoonful doses to children, for whose ailments it is an excellent remedy. It acts as a nerve sedative and also as a tonic upon the gastro-intestinal canal. It proves useful during dentition in cases of earache, neuralgic pain, stomach disorders and infantile convulsions. The flowers may also be used externally as a fomentation.

### Preparations

Fluid extract: dose, 1/4 to 1 drachm.

## Chamomile Stinking

**Botanical:** *Anthemis cotula* (LINN.)

**Family:** N.O. Compositae

### Synonyms

Mayweed. Maruta Cotula. Dog Chamomile. Maruta Foetida. Dog-Fennel.

### Part Used

Whole herb.

Stinking Chamomile or Stinking Mayweed (*Anthemis cotula*), an annual, common in waste places, resembles the true Chamomile, having large solitary flowers on erect stems, with conical, solid receptacles, but the white florets have no membranous scales at their base. It is distinguished from the other Chamomiles and closely allied genera by its foetid odour, which Gerard calls '*a naughty smell*.' This disagreeable smell, and the resemblance to fennel of its much-cut leaves gains it its other name of 'Dog's Fennel.' The whole plant, not only the flowers, has this intense odour and is penetrated by an acrid juice that often will blister the



**Stinking Chamomile**  
(*Anthemis cotula*)

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hand which gathers it. Writers on toxicology have classed this plant amongst the vegetable poisons.

### **Medicinal Action and Uses**

Tonic, antispasmodic, emmenagogue and emetic.

The whole herb is used. Like true Chamomile, a strong decoction will produce vomiting and sweating. In America it is used in country districts as a sudorific in colds and chronic rheumatism. The infusion made from 1 OZ. of the dried herb in a pint of boiling water and taken warm in wineglassful doses has been used with success in sick headache and in convalescence from fevers. It was formerly used in scrofula and hysteria and externally in fomentations. A weaker infusion taken to a moderate extent acts as an emetic.