Britton & Brown Illustrated Flora - 2nd Edition (1913) An Illustrated Flora of the Northern United States and Canada - Volume II - Medicinal Plant excerpts

Abronia fràgrans Nutt. White Abronia.

Abronia fragrans Nutt.; Hook. Kew Journ. Bot. 5: 261. 1853.

Perennial, viscid-pubescent, stem erect or ascending, usually much branched, 1°-2° high. Leaves oval, ovate or oblong-elliptic, petioled, obtuse or acutish at the apex, cuneate, truncate or rounded at the base, 1'-2½' long; bracts of the involucre 5 or 6, ovate or elliptic, white, 5"-8" long; flowers greenish-white, very numerous in the involucres, 8"-12" long, fragrant, opening at night; fruit 4"-6" high, coriaceous with 5 or sometimes fewer, undulate coarsely reticulated ridges about 1" wide, which do not close over its summit.

In dry soil, South Dakota to Nebraska, Colorado, Texas and Mexico. Reported from Iowa. June-Aug.



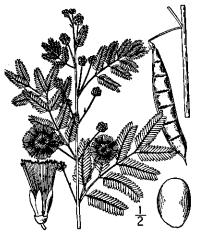
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Acacia angustíssima (Mill.) Kuntze. Prairie Acacia.

Mimosa angustissima Mill. Gard. Dict. Ed. 8, no. 19. 1768.
Mimosa filiculoides Cav. Ic. I: 55. pl. 78. 1791.
Acacia filicina Willd. Sp. Pl. 4: 1072. 1806.
Acacia filiculoides Trelease; Branner & Coville, Rep. Geol. Surv. Ark. 1888: Part 4, 178. 1891.
A. angustissima Kuntze, Rev. Gen. Pl. 32: 47. 1898.

A low thornless shrub, varying from glabrous to hirsute-pubescent. Pinnae of the leaves 2-15 pairs, oblong in outline, I'-2' long; leaflets 10-50 pairs, oblong or linear-oblong, about 2" long, less than I" wide, obtuse or acute, slightly inequilateral, I-veined; heads globose, many-flowered, axillary, slender-peduncled, 6"-10" in diameter; sepals distinct or nearly so; filaments yellow, 3-4 times as long as the sepals; pod linear, acute, often narrowed at the base, stipitate, mostly straight, I'-2' long, about 3" wide, flat, its valves thin, reticulated, glabrous or pubescent, impressed between the seeds.

Prairies, plains and bluffs, Missouri and Kansas to Texas, Arizona and Mexico. May-July.





Abutilon theophrasti Medik.

Velvet Leaf. Indian Mallow.

Sida Abutilon L. Sp. Pl. 685, 1753. Abutilon Theophrasti Medic, Malv. 28, 1787. Abutilon Avicennae Gaertn. Fruct. et Sem. 2: 251, pl. 135, 1791. A. Abutilon Rushy, Mem. Torr. Club 5: 222, 1894.

Annual, stout, 3°-6° high, branched, densely and finely velvety-pubescent. Leaves long-petioled, cordate, ovate-orbicular, 4′-12′ wide, dentate, or nearly entire, acuminate, the tip blunt; flowers yellow, 6″-9″ broad, axillary, solitary; peduncles stout, shorter than the petioles; head of fruit I′ in diameter or more; carpels 12-15, pubescent, dehiscent at the apex, each valve beaked by a slender awn.

In waste places, frequent or common throughout our area, except the extreme north. Naturalized or adventive from southern Asia, and widely distributed as a weed in warm countries. American jute or hemp. Indian hemp. Cotton-, sheepor mormon-weed. Butter-button- or velvet-weed. Pie-print or -marker. Butter-print. Aug.-Oct.

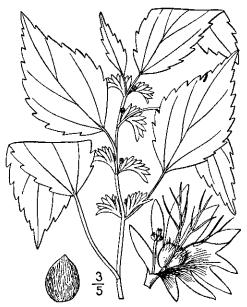
Acalypha ostryaefòlia Ridd. Hornbeam Three-seeded Mercury.

Acalypha caroliniana Ell. Bot. S. C. & Ga. 2: 645. 1824. Not Walt. 1788.

Acalypha ostryaefolia Riddell, Syn. Fl. W. States, 33. 1835.

Dark green, minutely pubescent. Stem erect, rather stout, simple or branched, $1^{\circ}-2\frac{1}{2}^{\circ}$ tall. Leaves thin, or membranous, ovate, $2\frac{1}{2}'-4'$ long, short-acuminate, serrate, obtuse or cordate at the base, the petioles often as long as the blades; staminate and pistillate flowers in separate spikes, the bractlets of the staminate minute, those of the pistillate conspicuous, lobed; capsule much depressed, 3-lobed, $1\frac{1}{2}''-2''$ in diameter, spiny; seeds ovoid, 1'' long, wrinkled.

New Jersey to Ohio, Kansas, Florida and Mexico. Bahamas, Cuba. June-Nov.



Acalypha virgínica L. Virginia Three-seeded Mercury, Mercury-weed.

Acalypha virginica L. Sp. Pl. 1003. 1753.

Dark green or becoming purplish, somewhat pubescent. Stem erect or ascending, 3'-2° tall; leaves ovate or elliptic, 10"-4' long, thin, coarsely serrate except near the base; staminate and pistillate flowers in the same axillary clusters, the staminate spike peduncled, usually included in the large palmately lobed bract; pistillate flowers 1-3 at the base of the staminate peduncle; capsule 3-lobed, subglobose, about 1½" in diameter, smooth, sometimes slightly pubescent; seeds ovoid, reddish, striate.

In woods and thickets, Nova Scotia to Minnesota, Florida and Texas. Occurs at 3000 ft. in Georgia. Upper leaves commonly forming a flat-topped cluster. June-Oct.



Acer Negúndo L. Box Elder. Ash-leaved or Cut-leaved Maple. Water Ash.

Acer Negundo L. Sp. Pl. 1056. 1753. Negundo aceroides Moench, Meth. 334. 1794. Negundo Negundo Karst. Deutsch. Fl. 596. 1880-83.

A tree with maximum height of 60°-70° and trunk diameter of 2°-3½°. Leaves pinnately 3-5-foliolate; leaflets ovate or oval, thin, pubescent when young, nearly glabrous or pubescent when old, 2'-5' long, 1'-3' wide dentate, slightly lobed or sometimes entire, acute or acuminate at the apex, rounded, or the terminal one somewhat cuneate at the base; flowers dioecious, drooping, very small, appearing a little before the leaves; samaras glabrous, 1'-1½' long, the broad wing finely veined, the united portion constricted at the base.

Along streams, Maine and Ontario to Manitoba, south to Florida, Texas and Mexico. Rare near the Atlantic Coast. Wood soft, weak, white; weight per cubic foot 27 lbs. Used for woodenware and paper pulp. Sugar maple. Red river, maple, Black or maple-ash. April.

Acer interior Britton, Western ash-leaved maple, of the Rocky Mountain region, and found in western Kansas and Nebraska, has thicker leaves, the united portions of the samaras not constricted at the base.



Acer nigrum Michx. Black Sugar Maple.

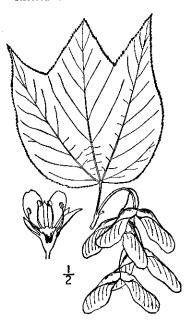
Acer nigrum Michx, f. Hist, Arb, Am. 2: 238, pl. 16. 1810.

Acer saccharinum var. nigrum T. & G. Fl. N. A. 1: 248. 1838.

Acer saccharum var. nigrum Britton, Trans. N. Y. Acad. Sci. 9: 10. 1889.

A tree, nearly or quite as large as the Sugar Maple, with rough, blackish bark. Leaves similar, but green both sides, thicker and generally more or less pubescent beneath, especially along the veins; lobes much broader and shorter, with few undulations or frequently entire, the basal sinus often narrow; samaras slightly more divergent.

Quebec, Ontario and Vermont to northern Alabama, west to South Dakota, Louisiana and Arkansas. Wood resembling that of the preceding species, the sap also yielding much sugar. Black or hard maple. April-May.



Acer pennsylvanicum L. Striped, Goose-foot or Northern Maple. Moosewood.

Acer pennsylvanicum L. Sp. Pl. 1055. 1753. Acer striatum Du Roi, Diss. Inaug. 58. 1771.

A small tree, with maximum height of about 35° and trunk diameter of about 8', the smoothish green bark striped with darker bands. Leaves larger, often 6'-8' long, broadest above the middle, thin, glabrous above, sparingly pubescent beneath when young, slightly cordate or truncate at the base, finely serrate or serrulate all around, 3-lobed near the apex, the lobes short and acuminate to a long tip; racemes terminal, narrow, drooping, 3'-4' long; flowers greenish yellow, 3"-4" broad; unfolding after the leaves; petals obovate; samaras glabrous, 1' long, widely divergent, the wing 4"-5" wide.

In rocky woods, Nova Scotia to Lake Superior, south, especially along the mountains to Georgia, and Tennessee. False or striped dogwood. Whistle-wood. Wood soft, satiny, light brown; weight per cubic foot 33 lbs. Ascends to 5000 ft. in North Carolina. Northern maple. May-

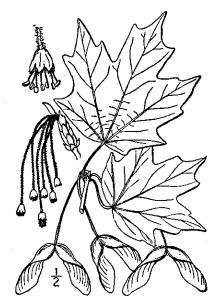
Acer sáccharum Marsh. Sugar or Rock Maple. Sugar-tree.

Acer saccharum Marsh, Arb. Amer. 4. 1785. Acer saccharinum Wang, Amer. 36. pl. 2. f. 26. 1787. Not L. 1753.

Acer barbatum Michx. Fl. Bor. Am. 2: 252. 1803.

A large and very valuable tree, with maximum height of 100°-120° and trunk diameter of 2½°-3½°. Leaves 3'-6' long, dark green above, pale beneath, cordate or truncate at the base, 3-7-lobed, the lobes acuminate, irregularly sinuate, the sinuses rounded; flowers in sessile, lateral or terminal corymbs, greenish yellow, drooping on capillary hairy pedicels, appearing with the leaves; petals none; samaras glabrous, slightly diverging, 1'-1½' long, the wing 3"-5" wide.

In rich woods, Newfoundland to Manitoba, south, especially along the mountains, to Florida and Texas. Its sap is the main source of maple sugar. Wood hard, strong, light reddish-brown; weight per cubic foot 43 lbs. The bird's-eye and curled maple of cabinet makers are varieties. The tree is widely planted for shade and for ornament. Hard, black or sweet maple. April-May.

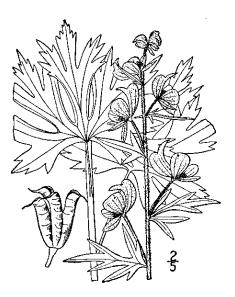


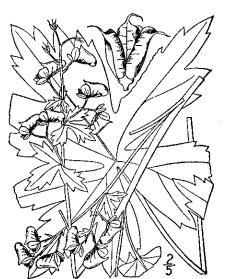
Aconitum noveboracénse A. Gray. New York Monkshood.

Aconitum noveboracense A. Gray; Coville, Bull. Torr. Club 13: 190. 1886.

Slender, erect, about 2° high, leafy. Lower leaves all petioled, 3'-4' broad, nearly orbicular, deeply 5-7-cleft, the divisions obovate, cuneate, toothed and cut, acute or acuminate, glabrous, rather thin; upper leaves nearly sessile, 3-5-cleft, otherwise similar, subtending branches of the loose pubescent few-flowered panicle; flowers blue, 6" broad, about 1' high, the arched gibbous helmet tipped with a prominent descending beak about 3" long; follicles erect, 3" long, subulate-beaked.

Orange, Ulster and Chenango Counties, N. Y., and Summit County, Ohio. Reported from Iowa. Nearest A. paniculatum Lam. of central Europe. June-Aug.





Aconitum reclinàtum A Gray. Trailing Wolfsbane.

A. reclinatum A. Gray, Am. Journ. Sci. 42: 34. 1842.

Trailing, 2°-8° long. Leaves 3-7-cleft, all but the upper petioled, thin, the lower 6'-8' broad, mainly obovate, acute, toothed and cleft toward the apex; simple panicle or raceme loose, pubescent; flowers white, 8"-10" long; helmet horizontal or nearly so, elongated-conic, with a straight, short beak; follicles 3, 5" long, with slender divergent beaks.

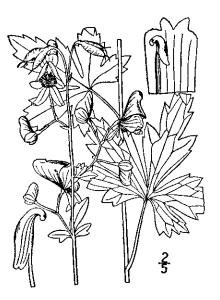
In woods, Cheat Mountain and Stony Man Mountain, Virginia, south along the Alleghanies to Georgia. Ascends to 5500 ft. in North Carolina. Trailing monkshood. July-Aug.

Aconitum uncinàtum L Wild Monkshood or Wolfbane.

Aconitum uncinatum L. Sp Pl. Ed. 2, 750. 1762.

Slender, weak, 2°-4° long, ascending or climbing, leafy. Leaves thick, broader than long, 3'-4' wide, deeply 3-5-lobed or cleft; lobes oblong or ovate-lanceolate, cleft or toothed, acute, glabrous or nearly so; panicle few-flowered, pubescent; flowers clustered at the ends of its branches, blue, I' broad or more; helmet erect, obtusely conic, acute in front but scarcely beaked; follicles 3, 6"-7" long, subulate-beaked

In woods, southern Pennsylvania, south along the mountains to Georgia, west to Wisconsin and Kentucky. Ascends to 3000 ft, in Virginia. June-Sept.

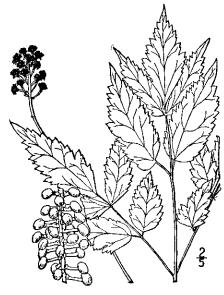


Actaea álba (L.) Mill. White Baneberry.

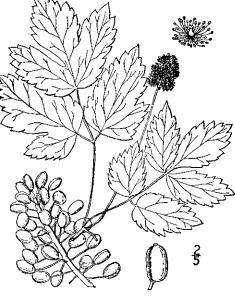
Actaea spicata var. alba L. Sp. Pl. 504. 1753. Actaea alba Mill, Gard, Dict. Ed. 8, no. 2, 1768.

Closely resembles the preceding species in habit and aspect. Leaflets generally more cut and the teeth and lobes acute or acuminate; raceme oblong; petals truncate at the apex; fruiting pedicels as thick as the peduncle and often red; berries short-oval, white, often purplish at the end.

In woods, Nova Scotia and Anticosti to Georgia, west to Minnesota and Missouri. Ascends to 5000 ft. in Virginia. April-June. Races or hybrids with white berries and slender pedicels (A. neglecta Gillman, A. eburnea Rydb.), and red berries on thickened pedicels are occasionally met with. White or blue cohosh. White-beads. Necklace-weed. White-berry. Snake-root.



Actaea rùbra (Ait.) Willd. Red Baneberry. Black Cohosh.



Actaea rubra Willd. Enum. 561. 1809.

A. rubra dissecta Britton; Britt. & Brown, Ill. Fl. 2: 55. 1897.

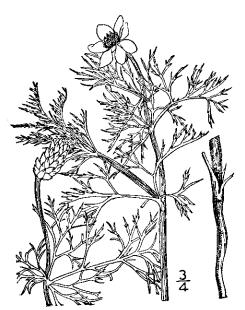
Erect, bushy, 1°-2° high, pubescent or glabrate. Leaves petioled, or the upper sessile, ternate, the divisions pinnate with the

Actaea spicata var. rubra Ait. Hort. Kew. 2: 221.

Erect, bushy, 1°-2° high, pubescent or glabrate. Leaves petioled, or the upper sessile, ternate, the divisions pinnate with the lower ultimate leaflets sometimes again compound; leaflets ovate or the terminal one obovate, toothed or somewhat cleft, or all deeply incised, the teeth mainly rounded or mucronate, or acutish; raceme ovoid; petals spatulate, shorter than the stamens; pedicels mainly slender, 5″-7″ long; berries red, oval or ellipsoid, 5″-6″ long.

In woods, Nova Scotia to New Jersey and Pennsylvania, west to South Dakota and Nebraska. April-June. A. spicata L., of Europe, has purplish-black berries. Coral- and -pearl. Red-berry. Snake-root. Poison-berry. Snake-berry. Toad-root. This and the following species are called also herb-christopher, grapewort and rattlesnake-herb.

Actaea arguta Nutt., of western North America, with smaller globose red berries, enters our western limits in western Nebraska and South Dakota.



Adonis ánnua L. Pheasant's or Bird's Eve.

Adonis annua L. Sp. Pl. 547. 1753.

Adonis autumnalis L. Sp. Pl. Ed. 2, 771. 1763.

Annual, erect, 1°-2° high, branched, glabrous. Leaves finally dissected, the lower petioled, the upper sessile, the segments acute; sepals smooth, deciduous; flowers 9"-18" broad, nearly globular, orange or red, the petals obovate, and darker colored at the base; achenes spicate.

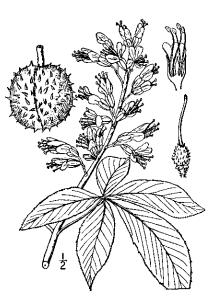
Commonly cultivated for ornament; spontaneous in gardens and occasionally escaped into waste places, especially southward. Fugitive from Europe. Summer. Adonis'-flower. Redmorocco. Camomile.

Aesculus glàbra Willd. Fetid Buckeye Ohio Buckeye.

Aesculus glabra Willd. Enum. 405. 1809.

A tree, with maximum height of about 75° and trunk diameter of 2°, the bark rough and fetid. Leaves long-petioled; leaflets 5, rarely 7, 3'-6' long, oval, oblong or lanceolate, acuminate, narrowed at the base, glabrous or slightly pubescent on the veins beneath, finely and sharply serrate, short-stalked or at first sessile; inflorescence loose, pubescent, 4'-6' long; flowers pale yellow; calyx campanulate; petals 4, parallel. 5"-7" long, slightly unequal, their claws about equalling the calyx-lobes; stamens curved, exserted; fruit 1'-1½' in diameter, very prickly when young, becoming smoothish at maturity.

Woods, Pennsylvania to Alabama, west to Michigan, Nebraska and Oklahoma. Wood soft, white, the sapwood slightly darker; weight per cubic foot 28 lbs. Timber used for artificial limbs and a variety of woodenware articles. American horse-chestnut. April-May.



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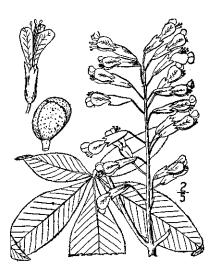
Aesculus Hippocástanum L. Horsechestnut.

Acsculus Hippocastanum L. Sp. Pl. 344. 1753.

A large tree, reaching a maximum height of about 100° and a trunk diameter of 6°, the buds very resinous. Leaves long-petioled, pubescent when young, glabrate when mature, or with persistent tufts of hairs in the axils of the veins on the lower surface; leaflets 5-7 (occasionally only 3 on some leaves), obovate, 4'-8' long, abruptly acuminate at the apex, cuneate-narrowed to the base, irreguarly crenulate-dentate; petals 5, spreading, white, blotched with red and yellow, inflorescence rather dense, often 1° long, the pedicels and calyx canescent; stamens declined, exserted; fruit globose, prickly.

Escaped from cultivation, New England, New York and New Jersey. Native of Asia. Called also Bongay, and the fruit, in children's games, Conquerors. Lambs. June-July.





Aesculus Pàvia L.

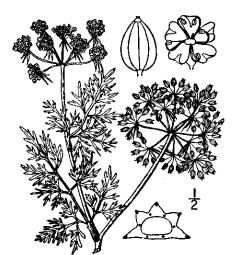
Red or Little Buckeye.

Aesculus Pavia L. Sp. Pl. 344. 1753.

A shrub, 4°-12° high, rarely a small tree up to 18° high. Leaflets 5-7, stalked, oblong, lanceolate, or obovate, 3'-5' long, 1'-1½' wide, acute or short-acuminate at the apex, all narrowed at the base, finely serrate, nearly glabrous on both sides when mature, shining; inflorescence loose; peduncles 1-3-flowered; flowers bright red-purple, 1'-1½' long; calyx tubular, its lobes short; petals 4, connivent, the upper longer than the lower; stamens about equalling the longer petals; fruit smooth; seeds dark brown.

In rich soil, Virginia to Florida, west to Kentucky, Arkansas and Texas. Fish-poison. April-May.

Aesculus austrina Small, Southern Buckeye, a similar shrub or small tree, has leaves tomentose beneath, and yellow-brown seeds; it inhabits the South-central States, ranging north to Missouri.



Aethusa Cynàpium L. Fool's Parsley or Cicely.

Aethusa Cynapium L. Sp. Pl. 256. 1753.

Erect, leafy, dichotomously branched, rather slender, 1°-2½° high. Leaves 2-3-pinnate, the lower slender-petioled, the upper nearly sessile; petiole-bases dilated; ultimate segments linear, acutish; umbels long-peduncled, 2'-3' broad in fruit, 8-12-rayed; rays ½'-1½' long; pedicels 1"-4" long; bractlets of the involucels 2-4, linear, turned downward; fruit about 1½" long, somewhat longer than broad; flowers white.

In waste places, Nova Scotia to Pennsylvania, Ontario and Minnesota. Poisonous. Adventive from Europe. False or dog's-parsley. Dog-poison. Small or lesser hemlock. June-Sept.

Agrimonia gryposépala Wallr. Tall Hairy Agrimony.

A. Eupatoria hirsuta Muhl. Cat. 47. 1813.
Agrimonia hirsuta Bicknell, Bull. Torr. Club 23: 509. 1896.

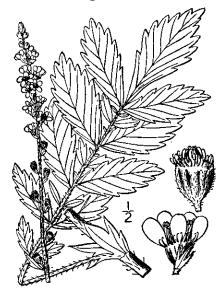
Agrimonia gryposepala Wallr. Beitr. Bot. 1: 49.

Mostly 3°-4° tall (2°-6°), minutely glandular, villous. Leaves large; leaflets thin, bright green, mostly 7, spreading, elliptic to broadly oblong, or the odd one obovate, apex acute, base often subcordate, coarsely serrate, the margins and nerves beneath ciliate, the lower surface rarely pubescent; interposed leaf-segments ovate, mostly 3 pairs; stipules broad, coarsely cut-toothed; flowers 4″-6″ broad, the buds ovoid, acute; fruit reflexed, 3″ long, short-turbinate, abruptly contracted at the pedicel, the disk convex, the dilated marginal rim bearing numerous reflexed spreading and erect bristles.

Woods and thickets, Nova Scotia to Minnesota, North Carolina and California. Roots fibrous. Feverfew. Beggar's-ticks. Cockle-bur. Stickweed. Stickseed. June-Aug.



Agrimonia striàta Michx. Britton's Agrimony.



A. striata Michx. Fl. Bor. Am. 1: 287. 1803. Agrimonia Brittoniana Bicknell, Bull. Torr. Club 23: 517. 1896.

Robust, 2°-6° tall, virgately branched. Roots fibrous. Stem hirsute-pubescent with short spreading brownish hairs, sub-appressed above; leaves numerous; leaflets 7-9, rarely 11, oblique to the rachis, tetragonal-elliptic to rhomboidlanceolate, acute or acuminate, deeply and closely serrate, dull green, thickish, rugose, softly pubescent beneath, glabrate above, their margins finely scabrous-ciliolate; interposed leaf-segments narrow, usually several pairs; stipules lanceolate, acuminate, laciniate; racemes long, erect or ascending; flowers crowded, 3"-5" wide; fruit 3"-4" long, reflexed, long-turbinate, deeply grooved, unmargined: disk flat or concave; bristles often purplish, short, crowded, inflexed and connivent over the sepals.

Along thickets and roadsides, Newfoundland to Saskatchewan, West Virginia, Nebraska and New Mexico. June-Sept.

Agrostemma Githàgo L. Corn Cockle. Corn Rose. Corn Campion.

Agrostemma Githago L. Sp. Pl. 435. 1753.

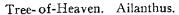
Lychnis Githago Scop. Fl. Carn. Ed. 2, 1: 310. 1772.

Erect, 1°-3° high, simple or with few erect branches, densely pubescent throughout with whitish appressed hairs. Leaves linear-lanceolate, acute or long-acuminate, erect, 2'-4' long, 2"-3" wide, the lowest narrowed at the base; flowers showy, 1'-3' broad; peduncles stout, 3'-8' long, erect; calyx ovoid, its lobes linear, foliaceous, 3 or 4 times the length of the tube and much exceeding the petals, deciduous in fruit; petals usually slightly emarginate, the blade obovate-cuneate.

In grain fields and waste places, frequent or occasional throughout our area. Adventive from Europe, occurring also in northern Asia. Corn-, mullen- or old-maid's pink. Crown-of-the-field. July-Sept.



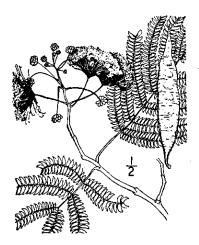
Ailanthus altissima (P. Mill.) Swingle



Ailanthus glandulosa Desf. Mem. Acad. Paris 1786: 265. 1789.

A tree, 40°-90° high. Leaves 1°-3° long, petioled, glabrous, odd-pinnate; leaflets 13-41, opposite or nearly so, stalked, ovate or ovate-lanceolate, cordate or truncate and often oblique at the base, acute or acuminate at the apex, entire, or with 1-4 blunt teeth near the base; flowers greenish, about 3" broad, pedicelled, the staminate ones ill-scented; samaras twisted, nearly 2' long, very conspicuous on the pistillate tree in autumn.

Escaped from cultivation, along roadsides and in fields, spreading extensively by suckers, and seeding freely in some localities, southern Ontario to Massachusetts, Virginia and Kansas. Chinese sumac. Heavenward-tree. False varnish-tree. Devil's-walking-stick. Naturalized from China, June-July.



Albizzia julibríssin Durazz. Pink Siris. Silk-tree.

A, julibrissin Durazz. Mag. Tosc. 34: 11. 1772.

A tree, up to 35° high, and trunk diameter of 1½°, the bark thin and scaly, the slender twigs smooth, reddish-brown. Leaves 8'-16' long, with 8-16 pairs of pinnae; the rachis tipped by a spine; leaflets 25 to 35 pairs, oblong, inequilateral, acute, 5"-8" long, revolute-margined, dark green above, pale green and pubescent beneath; heads panicled, about 2' in diameter; flowers pink; stamens more than 1' long; ovary short-stalked; pod 4'-6' long, narrowed at both ends, papery; seeds oval, flat, 4"-5" long.

 $V^i_{\mbox{\scriptsize rginia}}$ to Florida and Louisiana. Naturalized from southern Asia. April–July.





Althaea officinàlis L.

Marsh-Mallow, Wymote.

Althaea officinalis L. Sp. Pl. 686. 1753.

Perennial, herbaceous, erect, 2°-4° high, branching, densely velvety pubescent. Leaves broadly ovate, acute or obtuse, dentate and generally 3-lobed, the lower ones often cordate; veins elevated on the lower surfaces; petioles ½-1' long; flowers in terminal and axillary narrow racemes, pink, about I'-12' broad; bractlets of the involucels 6-9, linear, shorter than the 5 ovate-lanceolate acute calvx-segments; carpels 15-20, tomentose.

In salt marshes, coast of Massachusetts, Connecticut and New York; Pennsylvania, Michigan, Reported from New Jersey and Arkansas. Naturalized from Europe. Roots thick, very mucilaginous, used in confectionery, and in medicine as a demulcent. Summer. Mortification-root. Sweat-weed.

Althaea cannábina L., with digitately 5-parted leaves, has been found in waste places at Washington, D. C.

Althaea rosea L., the Hollyhock, is occasionally seen in waste places, spontaneous after cultivation.

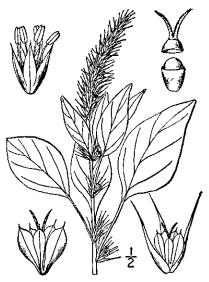
Amaranthus hýbridus L. Spleen Amaranth, Pilewort.

Amaranthus hybridus L. Sp. Pl. 990, 1753. Amaranthus hypochondriacus L. Sp. Pl. 991. 1753. A. chlorostachys Willd. Amaranth. 34. pl. 10. t. 19. 1790. A. paniculatus L. Sp. Pl. Ed. z, 1406. 1763.

Similar to the preceding species but darker green, or purple, pubescent or nearly glabrous; stem usually slender, erect, usually branched, 2°-8° tall. Leaves bright green on both sides or paler beneath, usually smaller, slender-petioled; spikes linear-cylindric, axillary and forming dense terminal panicles, ascending, somewhat spreading or drooping; bracts awned or awn-tipped, twice as long as the 5 oblong acute or cuspidate sepals; stamens 5; utricle scarcely wrinkled, circumscissile.

A weed, in waste grounds, range nearly of the preceding species, its races differing in color, pubescence and length of the awns of the bracts. Naturalized from tropical America. Slender pigweed. Red amaranth or cockscomb. Prince's-feather, Flower-gentle. Careless, Floramor. Aug.-Oct.





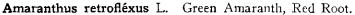
Amaranthus Pàlmeri S. Wats. Palmer's Amaranth.

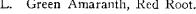
A. Palmeri S. Wats. Proc. Am. Acad. 12: 274, 1876.

Somewhat resembling the two preceding species, stem erect, slender, branched, 2°-3° tall, usually pubescent above. Leaves ovate, rhombic-ovate or the upper lanceolate, blunt at the apex, narrowed at the base, prominently veined, slender-petioled, the lower petioles often longer than the blades; flowers polygamous or dioecious, borne in elongated erect or drooping spikes often 1° long or more, and some of them commonly in small clusters in the upper axils; bracts subulate, spiny-awned, spreading, twice as long as the sepals; sepals 5, spatulate, clawed; utricle dry, circumscissile.

In dry soil, Missouri and Kansas to Texas and in eastern Massachusetts. Adventive. Native from New Mexico to California and Chihuahua, June-Sept.

Amaranthus caudatus L., with long dense red nodding terminal spikes, has been found in waste grounds in Connecticut.



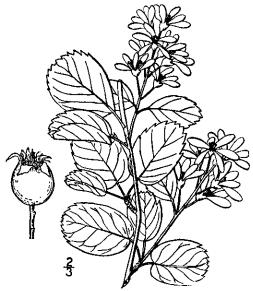


Amaranthus retroflexus L. Sp. Pl. 991. 1753.

Roughish-puberulent, rather light green, stem stout, erect or ascending, commonly branched, 1°-10° tall. Leaves ovate, rhombic-ovate or the upper lanceolate, slender-petioled, acute or acuminate at the apex, narrowed or acuminate at the base, the larger 3'-6' long, their margins undulate or entire; flowers green, polygamous, densely aggregated in terminal and axillary spikes, which are sessile, stout, obtuse or subacute, ovoid-cylindric, erect or ascending, ½'-2½' long, 4"-7" thick; bracts subulate, twice as long as the 5 scarious narrowly oblong or slightly spatulate mucronate-tipped obtuse or often emarginate sepals; stamens 5; utricle slightly wrinkled, thin, circumscissile, rather shorter than the sepals.

A weed, in cultivated and waste soil, throughout North America, north to Nova Scotia, North Dakota and Washington. Also in Europe. Naturalized from tropical America, Rough pigweed, Aug.-Oct.





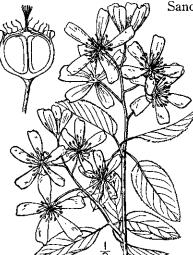
Amelanchier alnifòlia Nutt, Northwestern June or Service-berry.

Aronia alnifolia Nutt. Gen. 1: 306. 1818. A. alnifolia Nutt.; Roemer, Syn. Man. 3: 147. 1847.

A shrub, 6°-8° high, more or less tomeutose-pubescent when young, at length glabrate throughout and somewhate glaucous. Leaves thick, broadly elliptic or almost orbicular, very obtuse and often truncate (rarely acutish) at the apex, rounded or subcordate at the base, coarsely dentate above the middle, ½'-2' long; racemes short, rather dense; pedicels short; petals oblanceolate, cuneate, 3"-9" long, 2-4 times the length of the calyx; pome purple with a bloom, 3"-4" high, sweet.

Dry soil, western Ontario to British Columbia, South Dakota, Nebraska, New Mexico and California. Pigeon-berry. April-May.

Amelanchier canadénsis (L.) Medic. June-berry. Service-berry. May-or Sand-cherry.



Mespilus canadensis L. Sp. Pl. 478. 1753. Pyrus Botryapium L. f. Suppl. 255. 1781. A. Botryapium DC. Prodr. 2: 632. 1825. A. canadensis Medic, Geschichte 79. 1793.

A tree sometimes reaching the height of 60°, with trunk diameter of 2°, but usually lower, seldom over 25° high. Leaves ovate or oval, acute or acuminate at the apex, rounded or cordate at the base, sharply and finely serrate, sometimes sparingly pubescent when young, soon entirely glabrous, or the under surface sometimes persistently pubescent, 1'-3' long, or larger on young shoots; racemes spreading or drooping, pedicels long, slender; bracts silky, purplish, deciduous; petals linear, linear-spatulate, or linear-oblong, 6''-9'' long, 3-4 times the length of the nearly or quite glabrous calyx; pome globose, red or purple, sweet.

In dry woodlands, Nova Scotia to western Ontario,

In dry woodlands, Nova Scotia to western Ontario, Arkansas, Florida and Louisiana. Wood very hard, brown; weight per cubic foot 49 lbs. Service-tree. May-, juice-, or wild Indian-pear. Indian-cherry. Sugarpear, -plum, or-berry. Shad-bush. Boxwood. Bill-berry. June-plum. March-May. Fruit ripe June-July.

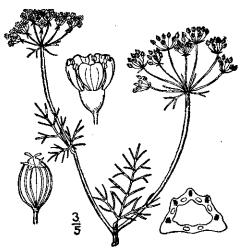
Amelanchier laevis Wiegand, of similar range, extending north to Newfoundland, with leaves glabrous or nearly so from the first, may be distinct.

Ammi majus L. Mock Bishop-weed.

Amni majus Walt. Fl. Car. 113. 1788. Not L. A. capillaceum Michx. Fl. Bor. Am. 1: 164. 1803. D. capillaceu DC. Mem. Omb. 38. 1829. Ptilimnium capillaceum Raf.; Seringe, Bull. Bot. 217. 1830. P. missouriense Coult. & Rose, Contr. Nat. Herb. 12: 444. 1909.

Slender, 1°-2° high or more, the branches ascending or sometimes divaricate. Leaves finely dissected into filiform segments, the upper sessile, the lower more or less petioled; involucral bracts, or some of them, pinnately parted; involucels of several linear bracts; umbels 2'-4' broad, 5-20-rayed, the rays 1'-2' long; pedicels 2"-8" long; fruit ovate, acute, 1"-1½" long.

In wet soil, especially brackish meadows, along the coast, Massachusetts to Florida, west to Texas, north to Kansas and Missouri. June-Oct. Called also herb-william, wood-nep, bole- or bull-wort.

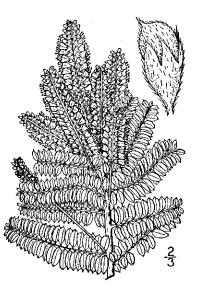


Amorpha canéscens Pursh. Lead-plant. Wild tea. Shoestrings.

Amorpha canescens Pursh, Fl. Am. Sept. 467. 1814.

A bushy shrub, 1°-3° high, densely white-canescent all over. Leaves sessile or very nearly so, numerous, 2'-4' long; leaflets 21-51, approximate, almost sessile, oval or short-lanceolate, obtuse or acutish and mucronulate at the apex, rounded or truncate at the base, 4"-7" long, 2"-3" wide, less pubescent above than beneath; spikes usually densely clustered, 2'-7' long; calyx-teeth lanceolate; standard bright blue, nearly orbicular or obcordate, about 2" long; pod slightly exceeding the calyx, 1-seeded.

Prairies, Indiana to Minnesota, North Dakota and Manitoba, south to Kansas, Colorado, Louisiana and New Mexico. Named from its leaden-hue, not as indicative of lead. July-Aug.





Amorpha fruticòsa L. False or Bastard Indigo. River-locust.

Amorpha fruticosa L. Sp. Pl. 713. 1753.

A shrub 5°-20° high, with pubescent or glabrous foliage. Leaves thin, petioled, 6′-16′ long; leaflets 11-21, distant, short-stalked, oval or elliptic, obtuse and mucronulate, or sometimes slightly emarginate at the apex, rounded or slightly narrowed at the base, 1′-2′ long, 5″-10″ wide, entire; spike-like racemes dense, clustered or solitary, 3′-6′ long; flowers short-pedicelled, 3″-4″ long; standard violet-purple, 2-3 times as long as the calyx, emarginate; stamens exserted; pod glabrous, glandular, thick-stalked, 3″-4″ long, acute, usually 2-seeded.

Along streams, Pennsylvania and Ohio to Minnesota, Saskatchewan, Florida, Colorado and Chihuahua. Also escaped from cultivation in the Eastern and Middle States. May-July.

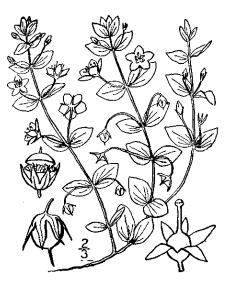
Amorpha angustifòlia (Pursh) Boynton, of Texas and Oklahoma, with thick leaflets, acute at both ends, is recorded from Iowa.

Anagallis arvénsis L. Red or Scarlet Pimpernel. Poor Man's or Shepherd's Weather-glass.

Anagallis arvensis L. Sp. Fl. 148. 1753. Anagallis coerulea Lam. Fl. Fr. 2: 285. 1778. Anagallis arvensis coerulea Ledeb. Fl. Ross. 3: 30. 1846.

Annual, diffuse, usually much branched; branches 4'-12' long, 4-sided. Leaves ovate or oval, membranous, opposite or rarely in 3's, sessile or somewhat clasping, obtuse or acutish, 3"-10" long, black-dotted beneath; peduncles filiform, ½-1½' long, recurved in fruit; calyx-lobes keeled, rather rigid, slightly shorter than the crenate glandular-ciliate or glabrous corolla-segments; flowers scarlet or blue, sometimes white, usually with a darker center, 2"-3" broad, opening only in bright weather; capsule glabrous, about 2" in diameter.

In waste places, Newfoundland to Florida, west to Minnesota, Texas and Mexico, and on the Pacific Coast. Naturalized from Europe. Red chickweed. Burnet-rose, Shepherd's-clock, Bird's-eye or-tongue. Sunflower. Eyebright. Wink-a-peep. Shepherd's-delight. May-Aug.



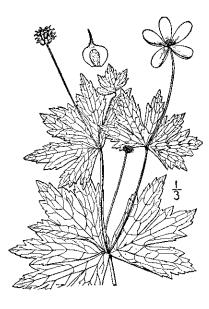
Anemone canadénsis L. Canada or Roundleaved Anemone.

Anemone canadensis L. Syst. Ed. 12, 3: App. 231. 1768.

Anemone pennsylvanica L. Mant. 2: 247. 1771.

Rather stout, 1°-2° high, somewhat hairy, especially on the lower surfaces of the leaves, branching at the involucre. Basal leaves long-petioled, broader than long, 3-5-parted, the divisions broad, oblong, acute, variously cleft and toothed, those of both primary and secondary involucres similar, sessile; sepals white, oblong, obtuse; flower 1′-1½ broad; head of fruit globose; achenes flat, nearly orbicular, puhescent, tipped with the stout persistent style, which is about their own length.

Low grounds, Labrador to Assiniboia, Massachusetts, Maryland, Illinois, Kansas and Colorado. A. dichotoma L., to which this has been referred, is a Siberian species with glabrous ovate achenes. Crowfoot. Round-headed anemone. May-Aug.

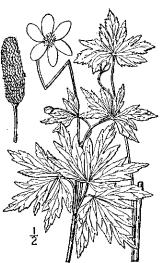


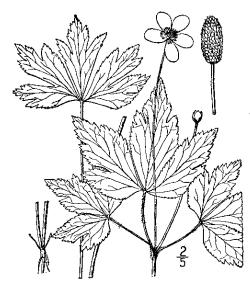
Anemone cylindrica A. Gray. Long-fruited Anemone.

Anemone cylindrica A. Gray, Ann. Lyc. N. Y. 3: 221. 1836.

Silky-hairy throughout, 1°-2° high, branched at the involucre. Basal leaves tufted, long-petioled, broader than long, 3-5-parted, the divisions caneate-obvate or caneate-oblanceolate, narrow; those of the involucre similar, their petioles about 1' long; sepals 5-6, greenish-white, oblong, generally obtuse; flowers about 9" broad, on elongated generally naked pedancles; head of fruit cylindric, 1' in length or more; achenes compressed, woolly, tipped with the minute styles.

Open places, eastern New Brunswick to Massachusetts, New York, New Jersey, Kansas and Saskatchewan. Also in the Rocky Mountains, south to New Mexico, and in British Columbia. June-Aug.



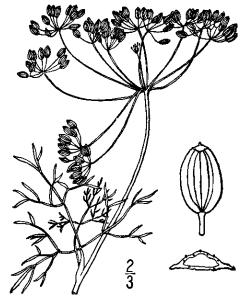


Anemone virginiàna L. Tall Anemone.

Anemone virginiana L. Sp. Pl. 540. 1753. A. riparia Fernald, Rhodora 1: 51. 1899.

Hairy, 2°-3° high, stout, branching at the involucre, the lateral peduncles bearing secondary involucres. Basal leaves long-petioled, broader than long, 3-parted, the divisions broadly cuneate-oblong, variously cleft and divided into acute serrate lobes; those of both primary and secondary involucres similar, on petioles 1'-2' long; sepals generally 5, white or greenish, acute or obtuse; flowers 9"-18" broad; head of fruit oblong to subcylindric, 9"-12" long; achenes compressed, woolly, tipped by the spreading or ascending subulate styles.

In woods, Nova Scotia to South Carolina, Kansas, Alberta and Arkansas. Consists of several races, differing in size and color of flower, shape of fruit and in the styles. Tumble-weed. Thimble-weed. June-Aug.



Anethum gravèolens L. Dill.

Anethum graveolens L. Sp. Pl. 263. 1753.

Stem usually branched above, striate, 1°-3° high. Leaves very finely dissected into almost filiform segments, similar to those of Foeniculum, the sheathing petioles strongly nerved and scarious-margined; umbels up to 6' broad, several-many-rayed, the rays 3' long or less; fruiting pedicels 5"-8" long; fruit about 3" long, 1½" wide.

Waste grounds, Connecticut to Virginia. Also in the West Indies. July-Sept.

Angelica atropurpùrea L. Great High or Purple-stemmed Angelica.

Angelica atropurpurea L. Sp. Pl. 251. 1753.

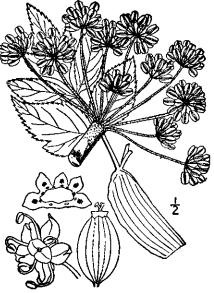
Angelica triquinata Michx. Fl. Bor. Am. 1: 167. 1803.

Archangelica atropurpurea Hoffm. Umbel. 161. 1814.

Stout, 4°-6° high, glabrous throughout, or the umbel slightly rough-hairy. Lower leaves often 2° wide, biternate and the divisions pinnate, the upper ones smaller, all with very broad dilated petioles; segments oval or ovate, acute or acutish, rather thin, sharply serrate and often incised, 1½'-2' long; umbels sometimes 10' broad, 9-15-rayed, the rays 2'-4' long; pedicels very slender, 4"-8" long; fruit broadly oval, 3"-4" long, slightly emarginate at the base, the lateral wings narrower than the carpels; oil-tubes numerous and contiguous; seed becoming loose from the pericarp.

In swamps and moist ground, Newfoundland to Ontario, Minnesota, south to Delaware, Illinois and Iowa, June-July. Aunt Jerichos. Archangel. Masterwort.





Angelica lucida L.

Sea-coast Angelica.

Angelica Archangelica Schrank, Denks. Regens. Bot. Gesell. 1: Abth. 2, 13, 1818. Not. L. 1753. Archangelica peregrina Nutt.; T. & G. Fl. N. A. 1: 622, 1840.
Ligusticum actaeifolium Michx. Fl. Bor. Am. 1: 166. 1803.
Coelopleurum actaeifolium Coult. & Rose, Contr. U. S. Nat. Herb. 7: 142, 1900.

Stout, branching, 2°-3° high, glabrous below, the umbels and upper part of the stem puberulent. Lower leaves large, 2-3-ternate, the segments thin, ovate, acute or acuminate, sharply and irregularly dentate and incised, 1½'-2½' long; umbels 3'-5' broad, 10-25-rayed; rays 1'-2' long; pedicels slender, 3"-6" long; fruit 2½''-3½" long, the lateral ribs scarcely stronger than the others.

Sea-coast, Greenland to Massachusetts, and on the lower St. Lawrence river. Summer. Referred in our first edition to C. Gmelini (DC.) Ledeb. of eastern Asia and Alaska, the type of the genus.

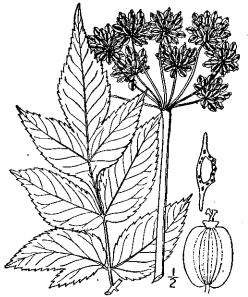
Angelica triquinata Michx.

Curtis' Angelica.

A. Curtisii Buckl. Am. Journ. Sci. 45: 173. 1843.

Glabrous, or the umbels and upper part of the stem slightly pubescent, 2°-3½° high. Leaves biternate, the divisions quinate or pinnate, the lower long-stalked, the upper mostly reduced to inflated petioles; segments rather thin, sometimes slightly pubescent on the veins beneath, ovate, acute or acuminate, sharply and irregularly dentate or incised, 2'-4' long; umbels 3'-6' broad, 9-25-rayed; rays rather stout. 1½'-3' long; pedicels slender. 4"-6" long, fruit oval, glabrous, 2"-3" long, emarginate at the base, the lateral wings broader than the carpel; oil-tubes solitary or sometimes 2 or 3 in the intervals; seed adherent to the pericarp.

In woods, central Pennsylvania, south along the Alleghanies to North Carolina, where it ascends to 6400 ft., and to Georgia. Aug.-Sept.



Angelica venenosa (Greenway) Fern.

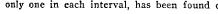
Pubescent or Hairy Angelica.

Ferula villosa Walt, Fl. Car. 115. 1788. Angelica hirsuta Muhl. Cat. Ed. 2, 30. 1818. Angelica villosa B.S.P. Prel. Cat. N. Y. 22. 1888.

Rather slender, 2°-6° high, the umbels and upper part of the stem densely tomentose-canescent. Lower leaves ternate or biternate, often 1° long, the divisions pinnate, the segments thick, oval to lanceolate, equally and rather finely dentate, obtuse or obtusish, 1'-2' long, upper leaves mostly reduced to sheathing petioles; umbels 2'-4' broad. 7-30-rayed; rays slender, 1'-1½' long; pedicels about 2" long; fruit broadly oval, emarginate at the base, 3" long, finely pubescent: lateral wings about as broad as the carpels; oil-tubes generally 3-6 in the intervals; seed adhering to the pericarp.

In dry soil, Connecticut to Florida, Minnesota, Tennessee and Missouri. Ascends to 3200 ft. in Virginia. Aunt Jerichos. July-Aug.

Angelica sylvestris L., of Europe, which resembles this species, but is less pubescent, with ovate to lanceolate acute leaflets, glabrous fruit, and oil-tubes mostly



only one in each interval, has been found on Cape Breton Island.

Aphanes arvénsis L. Parsley-Piert, or Field Lady's Mantle. Argentill.

Aphanes arvensis L. Sp. Pl. 123. 1753. Alchemilla arvensis Scop. Fl. Carn. Ed. 2, 1: 115. 1770.

Annual, softly pubescent, branching at the base, the branches usually slender, ascending, 1'-6' high. Stipules toothed or rarely entire; leaves very short-petioled, pubescent, fan-shaped, 2"-5" long, deeply 3-parted, the lobes cuneate, 2-4-cleft, the segments obtuse or acutish; flowers I"-I1" broad, in sessile axillary clusters partly enclosed by the stipules; calyx-lobes usually 4, ovate, obtusish or acute.

In dry fields, District of Columbia to Georgia and Tennessee and in Nova Scotia. Naturalized or adventive from Europe. Breakstone. Parsley-vlix. Parsley-breakstone. Firegrass. Bowelhivegrass. Colicwort. April-Sept.

The plant of the southeastern states (A. australis Rydb.) has smaller leaves and flowers than European specimens examined, but does not appear to be specifically distinct from them.



Apium graveolens L.

Celery. Smallage.

Apium graveolens L. Sp. Pl. 264. 1753.

Glabrous, stem erect, 1°-3° high, severalleaved. Leaves pinnate, the basal and lower ones long-petioled, the upper shortpetioled, or nearly sessile; leaf-segments 3 or 5, stalked, or sessile, thin, broadly ovate to oval, coarsely toothed and often incised; ½'-1½' long; umbels opposite the leaves, and terminal, 3-7-rayed; involucre and involucels small, or none; flowers very small, white, very short-pedicelled; fruit oval, scarcely 2" long, the ribs somewhat winged.

In waste places, escaped from cultivation in Virginia, and naturalized on the coast of California. Also in ballast about the seaports. Native of Europe. Old English names, march. ache, marsh parsley, mile. May-July,

Apium Ammi (L.) Urban [A. leptophyllum (DC.) F. Muell.], a slender annual weed of the Southern States and tropical regions, with finely divided leaves and small umbels of white flowers opposite the petioles, found in ballast, and recorded from Missouri, is not definitely known to be established within our area.

Aquilegia canadénsis L. Wild Columbine. Rock-bells.

Aquilegia canadensis L. Sp. Pl. 533. 1753. Aquilegia flavistora Tenney, Am. Nat. 1: 389. 1867. Aquilegia canadensis flaviflora Britton, Bull. Torr. Club

Aquilegia coccinea Small, Bull, N. Y. Bot. Gard. 1: 280.

Glabrous or somewhat pubescent, 1°-2° high, branching. Lower and basal leaves slender-petioled, biternate, 4'-6' broad, the ultimate leaflets sessile or on very short stalks, obovate, obtuse, cuneate, obtusely lobed and toothed, pale beneath; leaves of the upper part of the stem lobed or divided; flowers nodding, 1'-2' long, scarlet or rarely white, or yellow, the spurs nearly straight, 6" long, thickened at the end; stamens and styles longexserted; head of fruit erect; follicles slightly spreading, about 8" long, tipped with a filiform beak of about the same length.

In rocky woods, Nova Scotia to the Northwest Territory, south to Florida and Texas. Ascends to 5000 ft. in Virginia. Consists of several races, differing in size and color of the flowers, and in pubescence. Also at high altitudes in the Rocky Mountains. Honeysuckle. Rock-lily. Bells. Meeting-houses. Jackin-trousers. Cluckies. April-July,



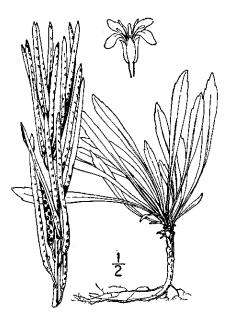
Arabis Drummóndii A. Grav. Drummond's Rock-cress.

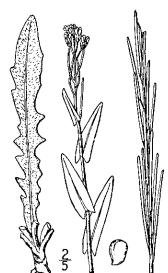
A. Drummondii A. Gray, Proc. Am. Acad. 6: 187.

Turritis stricta Graham, Edinb. New Phil. Journ. 1829: 350. Not Arabis stricta Huds.

Biennial, glabrous throughout, or the basal leaves sometimes sparingly pubescent; stem erect, 8'-3° tall, slightly glaucous. Basal leaves oblanceolate, long-petioled, dentate or entire, those of the stem lanceolate to oblong, erect or nearly so, entire, sessile, sagittate; flowers pink or nearly white, 4"-5" long, their pedicels erect; fruiting pedicels and pods erect or in age slightly spreading; pods 2'-4' long, \frac{1}{2}''-1\frac{1}{2}'' wide, rather blunt; seeds in 2 rows in each cell, winged.

Cliffs and rocky soil, Quebec to Connecticut, Ontario, northern Ohio, Illinois, Michigan, British Columbia, Oregon, south in the Rocky Mountains to Colorado and Utah. May-Aug.



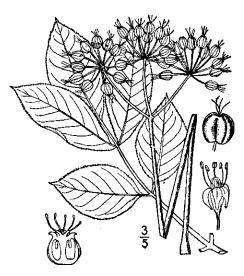


Arabis glàbra (L.) Bernh. Tower Mustard or Cress.

Turritis glabra L. Sp. Pl. 666, 1753. Arabis glabra Bernh, Verz. Syst. Erf. 195. 1800. Arabis perfoliata Lam. Encycl. 1: 219. 1783.

Biennial, erect, glabrous and decidedly glaucous above, pubescent at the base, nearly simple, 2°-4° high. Basal leaves petioled, 2'-10' long, oblanceolate or oblong, dentate or sometimes lyrate, hairy with simple pubescence, or with hairs attached by the middle; stem-leaves sessile, with a sagittate base, glabrous, entire or the lower sparingly dentate, 2'-6' long, lanceolate or oblong, acutish; pedicels 2''-6'' long, erect; flowers yellowish-white, 2'' broad; petals slightly exceeding the calyx; pods narrowly linear, 2'-3' long, ½'' wide, strictly erect and appressed; seeds marginless; style none.

In fields and rocky places, New Brunswick to southern New York and Pennsylvania, west to the Pacific Coast. Appears in some places as if not indigenous. Also in Europe and Asia. May-



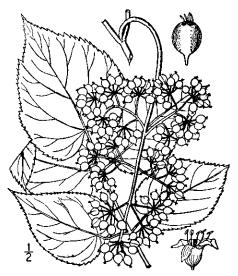
Aralia nudicaulis L. Wild or Virginian Sarsaparilla.

Aralia nudicaulis L. Sp. Pl. 274. 1753. Aralia nudicaulis prolifera A. C. Apgar, Bull.

Torr. Club 14: 166, 1887.

A. nudicaulis elongata Nash, loc. cit. 20: 374. 1893. Acaulescent or nearly so. Rootstock long; leaf arising with the peduncle from the very short stem, both sheathed at the base by dry thin scales; petioles erect, 6'-12' long; primary divisions of the leaf ternate, slender-stalked, pinnately 3-5-foliolate; leaflets oval, ovate or ovate-lanceolate, acuminate, finely serrate, 2'-5' long; umbels commonly 3, simple, rarely compound; involucre none; pedicels slender, glabrous; flowers greenish, 1½" broad; fruit globose, purplish-black, about 3" long, 5-lobed when dry.

In woods, Newfoundland to Manitoba, Idaho, Georgia, Missouri and Colorado. Small spike-nard. Rabbit-root. False sarsaparilla. Wild liquorice. Shot-bush. May-June.



Aralia racemòsa L. American Spikenard. Indian-root. Fig. 3090.

Aralia racemosa L. Sp. Pl. 273. 1753.

Herbaceous, divergently much branched, unarmed, 3°-6° high, glabrous or slightly pubescent. Roots large and thick, aromatic; leaves ternately or rarely quinately compound, the divisions pinnate; leaflets broadly ovate or orbicular, thin, acuminate at the apex, cordate at the base, 2'-6' long, sharply and doubly serrate, sometimes pubescent on the veins beneath; umbels numerous, racemose-paniculate; peduncles and pedicels puberulent; involucels of a few subulate bractlets; flowers greenish, about 1" broad; fruit nearly globular, dark purple or reddish-brown, about 3" in diameter; styles united below.

In rich woods, New Brunswick to Georgia, Minnesota, South Dakota and Missouri. July-Aug. Spignet. Spicebush. Petty morel. Life-ofman. Old maid's-root.

Aralia spinòsa L. Hercules' Club. Angelica or Spikenard Tree.

Aralia spinosa L. Sp. Pl. 273. 1753.

A shrub or tree, reaching a maximum height of about 40° and trunk diameter of 12′ but usually much smaller. Stem, branches and petioles spiny; leaves long-petioled, bipinnate, usually with a leaflet at the base of each pinna; leaflets ovate, thick, acute or acuminate, stalked, serate, dark green above, glaucous and sometimes slightly pubescent beneath, 1′-4′ long; umbels very numerous, in terminal compound panicles; involucels of several short bractlets; peduncles and pedicels pubescent; flowers white, 2″ broad; pedicels 3″-4″ long in fruit; fruit ovoid, black, 5-lobed, about 3″ long; styles distinct.

In low grounds and along streams, southern New York to Florida, west to Indiana, Missouri and Texas. Freely planted for ornament, and sometimes escaping from cultivation further north. June-Aug. Wild orange. Pick or pigeontree. Prickly elder. Prickly ash. Toothache-tree.



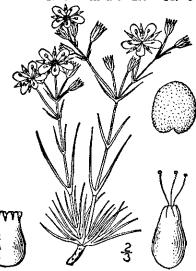
Arctostaphylos uva-ursi (L.) Spreng.

Red Bearberry. Kinnikinic.

Arbutus Uva-Ursi L. Sp. Pl. 395. 1753. Arctostaphylos Uva-Ursi Spreng. Syst. 2: 287. 1825.

Trailing or spreading on the ground, branched; branches 6'-24' long, the twigs puberulent. Leaves spatulate, coriaceous, obtuse, entire, evergreen, glabrous or minutely puberulent toward the base, ½-1' long, 2"-5" wide, finely reticulate-veined; petioles about 1" long, puberulent; flowers few in short racemes; pedicels 1"-2" long; corolla ovoid, constricted at the throat, white, about 2" long; drupe globose, red, glabrous, insipid, rather dry, 3"-5" in diameter, usually containing 5 coalescent nutlets, each 1-nerved on the back.

In dry, sandy or rocky soil, Labrador and arctic America to Alaska, south to southern New Jersey, Pennsylvania, Illinois, Missouri, Nebraska, Colorado and California. Also in northern Europe and Asia. May-June. Mountain-box. Universe-vine. Rapper-dandies. Fox- or meal-plum or -berry. Bear's-grape-bilberry or -whortleberry. Rock- or crow-berry. Barren myrtle or bilberry. Mountain, upland, wild- or hog-crawberry. Barren myrtle.

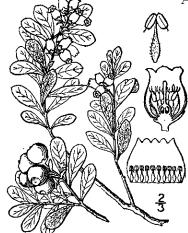


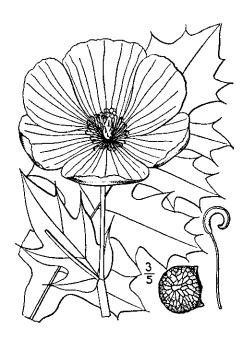
Arenaria Féndleri A. Gray. Fendler's Sandwort.

A. Fendleri A. Gray, Mem. Am. Acad. (II.) 4: 13. 1849.

Perennial by a woody root, pale green, glandular-pubescent above; stems tufted, erect, very slender, usually several times forked, 4'-15' tall, the internodes 1'-2' long. Lower leaves subulate or setaceous, glabrous or minutely ciliate. 1'-4' long, about 4" wide, the upper gradually smaller and somewhat connate at the base; cyme loose, its forks filiform, several-flowered; pedicels very glandular, 3"-12" long; flowers 4"-6" broad; sepals linear-lanceolate, acuminate, scarious-margined, nearly as long as the obovate petals; capsule narrowly oblong, rather shorter than the sepals, 3-valved, the valves 2-toothed.

In dry, usually rocky soil Nebraska and Wyoming to Utah, south to New Mexico and Arizona. June-Aug.





Argemone albiflora Hornem.

White Prickly Poppy.

Argemone alba Lestib. Bot. Belg. Ed. 2: 3: Part 2, 132. 1799.

A. albiflora Hornem. Hort. Havn. 469. 1815.

Commonly stouter and taller than the preceding species. Leaves pinnatifid or pinnately lobed, glaucous or green, not blotched, but sometimes whitish along the veins; flowers white, usually much larger, 3'-4' broad, distinctly peduncled; petals rounded; spines of the sepal-tips stouter; capsules I'-I½' long.

Georgia and Florida to Missouri and Texas. Spontaneous after cultivation in northern gardens. May-Aug.

Argemone mexicàna L. Mexican Prickly or Thorn Poppy.

Argemone mexicana L. Sp. Pl. 508. 1753.

Stem stout, 1°-2° high, simple or sparingly branched, spiny or sometimes nearly unarmed. Leaves sessile, clasping by a narrowed base, 4'-10' long, 2'-4' wide, glaucous, white-spotted, runcinate-pinnatifid, spiny-toothed and more or less spiny on the veins; flowers yellow or cream-colored, sessile or subsessile, 1'-2' broad; sepals acuminate, bristly-pointed; stamens 4"-5" long; filaments slender, much longer than their anthers; stigma sessile or nearly so; capsule 1' long or more.

In waste places, Massachusetts to New Jersey, Pennsylvania, Florida and Texas. Also in ballast about the northern seaports. Adventive from tropical America. A common weed in the American tropics, and introduced into the Old World. The seed yields a valuable painter's oil, June-Sept. Bird-in-the-bush. Devil's-fig. Yellow, Flowering or Jamaica thistle.



Argemone polyanthemos (Fedde) G.B. Ownbey,

Leafy White Prickly Poppy.

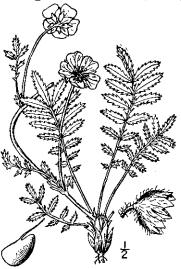
Argemone intermedia Sweet, Hort. Brit. Ed. 2, 585. 1830.

Stem stout, prickly, glabrous and glaucous, often 2° high or more. Leaves lobed or pinnatifid, very prickly, usually whitish-blotched; flowers large, white, sessile or nearly so, 3'-4' wide; petals rounded; spines of the sepal-tips spreading; capsule oblong, prickly, about I' long.

Prairies and plains, Illinois to South Dakota, Wyoming, Nebraska, Texas and Mexico. Has been confused with the preceding species, and with A. platyceras Link & Otto. May-Aug.

Argemone hispida A. Gray, ranging from Wyoming to Utah and New Mexico, differs in the stem and branches being hispid-pubescent. It has been recorded from Kansas, perhaps erroneously.





Argentina Anserina (L.) Rydb. Silver-weed. Wild or Goose-tansy.

Potentilla Anserina L. Sp. Pl. 495. 1753. Argentina vulgaris Lam. Fl. Franc. 3: 119. 1778. A. Anserina Rydb. Mem. Dept. Bot. Col. Univ. 2: 159. 1898. A. Babcockiana Rydb. N. Am. Fl. 22: 354. 1908.

A. litoralis Rydb. loc. cit. 1908.

Herbaceous, tufted, spreading by slender runners 1°-3° long. Stipules membranous; leaves petioled, pinnate, 3'-18' long; leaflets 7-25, oblong, oblanceolate or obovate, obtuse, the lower generally smaller, often with still smaller ones interspersed, all sharply serrate, nearly glabrous above, white or silky-pubescent beneath; peduncles axillary, solitary, slender, erect, 1-flowered, about equalling the leaves; flower yellow, 8"-12" broad; petals broadly oval or obovate, entire or emarginate, exceeding the ovate acute calyx-lobes and oval bractlets; stamens about 20; style filiform, lateral; receptacle villous; achenes grooved or grooveless.

On shores and salt meadows, New Jersey to Greenland, west to Nebraska, British Columbia and Alaska, south in the Rocky Mountains to New Mexico and to California. Also in Europe and Asia. Argentina. Silver-feather. Dog'stansy. Goose-grass. May-Sept. Consists of several or numerous races, differing in size, in shape of the leaflets, and slightly in the achenes; small northern plants have been referred to A. Egedii of Greenland.

Armoracia rusticana P.G. Gaertn., B. Mey. & Scherb. Horse-radish.

Cochlearia Armoracia L. Sp. Pl. 648. 1753. Nasturtium Armoracia Fries; A. Gray, Man. Ed. 2, 31. 1856.

Roripa Armoracia A. S. Hitchcock, Spring Fl. Manhattan 18. 1894.

1rmoracia rusticana Gaertn. Meyer & Schreb, Fl. Wett. 2: 426. 1800.

Erect, 2°-3° high, from deep thick roots. Basal leaves on thick petioles 6'-12' long, the blade oblong, often nearly as long, crenate, sinuate or even pinnatifid, rough but glabrous; upper leaves smaller, sessile, narrowly oblong or lanceolate, crenate or dentate; racemics paniculate, terminal and axillary; pedicels very slender, ascending, 2"-3" long; flowers white, showy, 2"-4' broad; pods oblong or nearly globose; style very short

Escaped from gardens into moist grounds, especially along streams. Frequent. Adventive from Europe. The roots furnish the well-known sauce. Summer.



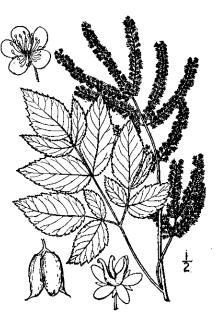
Aruncus dioicus var. vulgaris (Maxim.) Hara

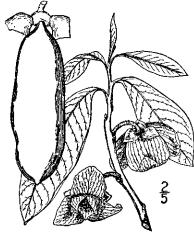
Goat's-beard.

Spiraea Aruncus L. Sp. Pl. 490. 1753. Aruncus sylvester Kostel. Ind. Hort. Prag. 15. Name only. 1844. Aruncus Aruncus Karst. Deutsch. Fl. 779. 1880-83.

Glabrous or pubescent; stem erect, somewhat branched, 3°-7° high. Leaves long-petioled, the lower 1° long or more, pinnate, 3-7-foliolate; leaflets ovate, lanceolate or oval, thin, stalked or sessile, acuminate or acute at the apex, rounded, slightly cordate or sometimes narrowed at the base, sharply doubly serrate or incised, 1'-3' long; spikes slender, elongated, erect or spreading; flowers 1"-2" wide; follicles short.

In rich woods, mountains of Pennsylvania to Iowa, south to Georgia and Missouri, and in northern Europe and Asia. Consists of several races, differing in pubescence and slightly in the size and shape of the fruit. Ascends to 4200 ft. in North Carolina. May-July.





Asimina tríloba (L.) Dunal. North American Papaw. False banana.

Annona triloba L. Sp. Pl. 537. 1753. Asimina triloba Dunal, Mon. Anon. 83. 1817.

A tall shrub or tree 10°-45° high, the trunk 5'-10' in diameter. Shoots and young leaves dark-pubescent, becoming glabrous at maturity; leaves obovate, acute, 6'-12' long, cuneate or rounded at the base; petioles 4"-6" long; flowers axillary, on shoots of the preceding year, appearing with the leaves, 1'-1½' in diameter, dark purple; sepals ovate, 4"-6" long, densely dark-pubescent, as are the short peduncles; outer petals spreading, nearly orbicular, slightly exceeding the ovate inner ones; stamens numerous, short; fruit a fleshy berry, 3'-7' long, 1'-2' thick, sweet, edible and brown when ripe, pendulous, several on a thick peduncle.

Along streams, southwestern Ontario and western New York. Pennsylvania and western New Jersey to Michigan, Florida, Kansas and Texas. March-April, the fruit mature in October. Wood light, soft, weak, greenish-yellow. Weight per cubic foot 24 lbs. Custard-apple. Fetid shrub.



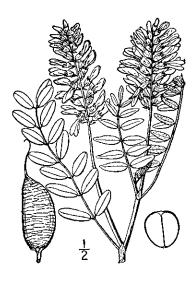
Astragalus americanus (Hook.) M.E. Jones,

Arctic Milk Vetch.

P. frigida var. americana Hook. Fl. Bor. Am. 1: 140. 1830. Astragalus frigidus var. americanus S. Wats. Bibl. Index, 1: 193. 1878. Phaca americana Rydb.; Britt. & Brown, Ill. Fl. 2: 304. 1897.

Erect, nearly simple, glabrous, 1°-2° high. Stipules foliaceous, ovate-oblong, 2"-6" long; leaflets 7-17, oval or ovate-lanceolate, 9"-18" long; peduncles generally exceeding the leaves; flowers white, 8"-9" long, in loose racemes; pedicels filiform, ½' long in fruit; pod 1-celled, stipitate, inflated, membranous, 10"-12" long, acute at each end, oblong, dehiscent at maturity, glabrous, shining.

In wet rocky places, Quebec to British Columbia and Alaska, south to South Dakota and in the Rocky Mountains to Wyoming, June-July.



Astragalus canadensis L.

Carolina or Canadian Milk Vetch. Astragalus carolinianus L. Sp. Pl. 757. 1753. Astragalus canadensis L. Sp. Pl. 757. 1753.

Glabrous or slightly pubescent, erect or ascending, Glabrous or slightly pubescent, erect or ascending, branched, 1°-4° high. Stipules membranous, broadly lanceolate, acuminate, 2"-4" long; leaflets 15-31, elliptic or oval, obtuse or slightly emarginate at the apex, rounded at the base, 1'-2' long, 3"-9' wide; peduncles longer than the leaves, or shorter; flowers greenish yellow, 6"-8" long in dense thick spikes; pod oblong, sessile, 2-celled, coriaceous, dehiscent, glabrous, erect, teres are constitutes slightly furrowed at the dorsal suture. rete, or sometimes slightly furrowed at the dorsal suture, pointed, nearly straight, 5"-8" long.

Along streams, Quebec and Hudson Bay to Saskatchewan, western New York, Georgia, Louisiana, Nebraska and Utah. Canadian rattle-weed. July-Aug.

Astragalus crassicarpus var. crassicarpus Nutt.

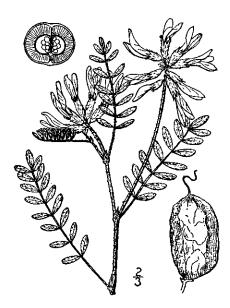
Rvdb. Ground Plum.

Astragalus crassicarpus Nutt. Fraser's Cat. 1813. Astragalus carnosus Pursh, Fl. Am. Sept. 740. In part. 1814.

A. caryocarpus Ker, Bot. Reg. 2: pl. 176. 1816. G. crassicarpum Rydb. in Small, Fl. SE. U. S. 616.

Appressed-pubescent, branching at the base, branches decumbent or ascending, 6'-15' long, mostly simple. Stipules ovate, acute, 2"-3" long; leaflets 15-25, oblong, elliptic or sometimes obovate, obtuse, narrowed at the base, 3"-6" long, 1½"-2½" wide; peduncles equalling or shorter than the leaves; flowers violet-purple, 8"-9" long, in short racemes; pods thick, glabrous, globose or oval, short-pointed, 8"-12" in diameter.

Prairies, Minnesota to Manitoba, Saskatchewan, Iowa, Missouri, Colorado and Texas. Fruit edible, collected by prairie-dogs for their winter store. April-June. Buffalo-pea, -bean or -apple.



Atriplex argéntea Nutt. Silvery Orache. Saltweed.



Atriplex volutans A. Nelson, Bull. Torr. Club 25: 203.

Annual, pale, densely silvery-scurfy or becoming smooth, stem erect or ascending, bushy-branched, 6'-20' high, angular. Leaves firm, triangularhastate or rhombic-ovate, mostly acute at the apex, narrowed or subtruncate at the base, petioled or the upper sessile, entire or sparingly dentate, $\frac{1}{2}'-2'$ long, the basal lobes short; flowers in capitate axillary clusters, or the staminate in short dense spikes; fruiting bractlets suborbicular, rhombic or broader than high, 2"-4" wide, united nearly to their summits, the margins sharply toothed, the sides sometimes tubercled or crested; radicle of the embryo pointing downward.

In dry or saline soil, Minnesota to British Columbia, Missouri, Kansas, Colorado and Utah. June-Sept.

Atriplex expánsa S. Wats., admitted into our first edition, is not definitely known within our area,

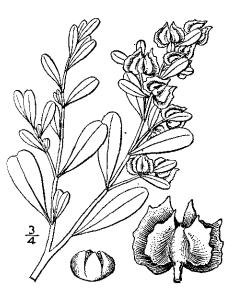
Atriplex canéscens (Pursh) James. Bushy Atriplex.

Calligonum canescens Pursh, Fl. Am. Sept. 370.

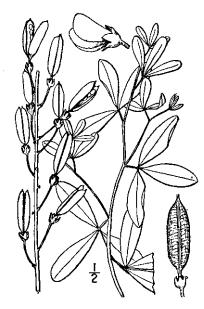
Atriplex canescens James, Trans. Am. Phil. Soc. (II.) 2: 178. 1825.

A pale densely scurfy shrub, 1°-3° high, resembling the preceding species and with similar foliage. Flowers in short terminal spikes and in axillary clusters, commonly dioecious, sometimes monoecious; bractlets ovate in flower, united nearly to their summits; in fruit appendaged by 4 broad thin distinct wings, which are 2"-4" broad at the middle and usually about twice as high, strongly reticulate-veined, not tubercled nor crested, toothed near their summits or entire.

In dry or saline soil, South Dakota to Kansas, Texas, New Mexico and Mexico, west to Oregon and California. Sage-brush. Cenizo. July-Sept.







Baptisia álba (L.) R. Br. White Wild Indigo.

Crotalaria alba L. Sp. Pl. 716. 1753.

Baptisia alba R. Br. in Ait. Hort. Kew. Ed. 2, 3: 6. 1811.

Glabrous throughout, divergently branching, 1°-3° high. Leaves petioled, 3-foliolate; petioles slender, 3"-9" long; leaflets oblong or oblanceolate, narrowed at the base, obtuse at the apex, 1'-1½' long, 4"-6" wide, rather thin, green in drying; stipules and bracts minute, subulate, early deciduous; racemes elongated, erect, 6'-10' long, lateral, long-peduncled; pedicels 3"-8" long; flowers white, 6"-7" long; pod linear-oblong, about 1½' long, 4" thick, short-stalked in the calyx, abruptly tipped with an almost filiform deciduous style.

In dry soil, North Carolina to Florida. Recorded from Missouri and southern Indiana, but we have seen no specimens collected west or north of the South Atlantic States. Erroneously recorded from Minnesota and Ontario. Maylune. Prairie-indigo.

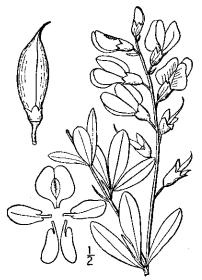
Baptisia austràlis (L.) R. Br. Blue Wild or Blue False Indigo.

Sophora australis L. Syst. Nat. Ed. 12, 2: 287. 1767. B. australis R. Br. in Ait. Hort. Kew. Ed. 2, 3: 6. 1811.

Glabrous, stout, $4^{\circ}-6^{\circ}$ high. Leaves short-petioled, 3-foliolate; leaflets oblanceolate or sometimes oval, obtuse at the apex, cuneate at the base, entire, $1'-2\frac{1}{2}'$ long, sessile or nearly so; stipules lanceolate, equalling the petioles, or longer, persistent; racemes terminal, erect, loosely flowered, clongated (sometimes 10' long); bracts narrow, caducous; pedicels 2''-3'' long; flowers indigo-blue, 9''-12'' long; pod oblong, stout-stalked in the calyx, $1'-1\frac{1}{2}'$ long, 5''-6'' thick, tipped with the subulate style.

In rich soil, District of Columbia to western Pennsylvania, Missouri, Kansas, Georgia and Texas. Naturalized in the Connecticut River Valley. in Vermont, escaped from cultivation. June-Aug. Rattle-bush.

A hybrid of this species with B. bracteata has been observed by Prof. A. S. Hitchcock in Kansas.



Baptisia leucántha T. & G. Large White Wild Indigo.

Baptisia leucantha T. & G. Fl. N. A. 1: 385. 1840.

Glabrous throughout, succulent, branching, 2°-4° high, the branches stout, ascending. Leaves petioled, 3-foliolate, blackening in drying; leaflets obovate or oblanceolate, I'-2' long, 6"-12" wide, very obtuse, rounded and sometimes slightly emarginate at the apex, narrowed or cuneate at the base; stipules lanceolate or linear, equalling or shorter than the petioles, deciduous; racemes lateral, sometimes I° long, loosely flowered; flowers white, 9"-10" long; pedicels 2"-3" long; pod ellipsoid, long-stalked in the calyx, about 9" long, tipped with the subulate style.

In rich soil, Ontario to Minnesota, south to Kentucky, North Carolina, Florida, Kansas, Arkansas and Texas. June-July. White false-indigo.

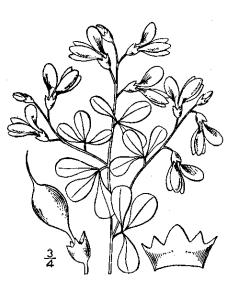


Baptisia tinctòria (L.) R. Br. Wild Indigo. Yellow, Indigo or Clover Broom. Horsefly-weed.

Sophora tinctoria L. Sp. Pl. 373. 1753. B. tinctoria R. Br. in Ait. Hort. Kew. Ed. 2, 3: 6. 1811.

Glabrous, erect, succulent, much branched, 2°-4° high. Leaves petioled, 3-foliolate; leaflets obovate or oblanceolate, ½′-1½′ long, sessile or nearly so, obtuse, cuneate at the base, entire, turning black in drying; stipules minute, caducous; racemes numerous, few-flowered, terminal; bracts minute, deciduous; pedicels 1″-2″ long; flowers bright yellow, about ½′ long; pods ovoid or nearly globose, 3″-5″ long, tipped with the subulate style.

In dry soil, Maine to Vermont, Ontario, Minnesota, Florida and Louisiana. June-Sept. Indigoweed. Shoofly. Rattle-bush. Horse-fleaweed.



Barbarea vulgaris Ait. f.

Yellow Rocket or Cress.

Erysimum Barbarea L. Sp. Pl. 660. 1753. Barbarea vulgaris R. Br. in Ait. Hort. Kew. Ed. 2, 4: 109. 1812.

Barbarea vulgaris var. arcuata A. Gray, Man. Ed. 2, 35. 1856.

35. 1856. Barbarea Barbarea MacM. Met. Minn. 259. 1892.

Tufted, stems erect, 1°-2° high. Lower leaves petioled, 2'-5' long, pinnatifid; terminal division much larger than the 1-4 pairs of lateral ones, all oval or obovate, repand-toothed or sometimes entire; upper leaves sessile or nearly so, sometimes clasping; flowers bright yellow, 3"-4" broad; pods spreading or ascending, about 1' long, obscurely 4-angled; pedicels about 2" long.

In fields and waste places, Labrador to southern New York and Virginia and locally in the interior. Also on the Pacific Coast. Naturalized from Europe. Leaves thickish, shining above. April-June. Bitter, winter- or rocket-cress. Winter- or wound-rocket. Herb Barbara.



Berberis canadénsis Mill. American Barberry.

B. canadensis Mill, Gard. Dict. Ed. 8, no. 2. 1768. Berberis vulgaris var. canadensis Ait. Hort. Kew. 1: 479. 1789.

A shrub, 1°-6° high, with slender, reddishbrown branchlets. Leaves similar to those of B. vulgaris, but with more divergent and distant teeth, or sometimes nearly entire; axillary spines 3-pronged; racemes few-flowered; petals conspicuously notched or emarginate at the apex; flowers about 3" broad, berries scarlet, oval or subglobose.

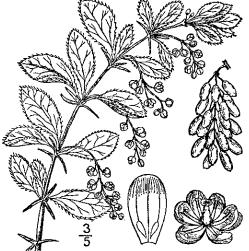
In woods, mountains of Virginia to Georgia along the Alleghanies, and in Missouri. June. Referred by Regel to B. sincnsis Desf., as a variety. Readily distinguished from all races of B. vulgaris by its dark-colored twigs.

Berberis vulgàris L. European Barberry.

Berberis vulgaris L. Sp. Pl. 330. 1753.

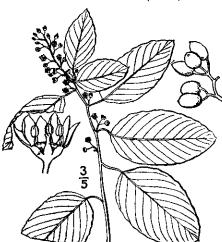
A glabrous shrub, 6°-8° high, the branches arched and drooping at the ends, the twigs gray. Leaves alternate or fascicled, obovate or spatulate, unifoliolate, obtuse, thick, I'-2' long, bristly serrate, many of those on the young shoots reduced to 3-pronged spines, the fascicles of the succeeding year appearing in their axils; racemes terminating lateral branches, many-flowered, I'-2' long (3'-4' in fruit); flowers yellow, 3''-4'' broad with a disagreeable smell; petals entire; berries oblong or ellipsoid, scarlet when ripe, acid.

In thickets, naturalized from Europe in the Eastern and Middle States, adventive in Canada and the West. Native of Europe and Asia, Consists of numerous races. Pep-



peridge-bush. Jaundice-tree or -berry. Wood-sour. May-June.

Berchemia scándens (Hill.) Trelease. Supple-Jack. Rattan-Vine.



Rhamnus scandens Hill, Hort. Kew. 453. pl. 20. 1768. R. volubilis L. f. Suppl. 152. 1781. Berchemia volubilis DC. Prodr. 2: 22. 1825. Berchemia scandens Trel. Trans. St. Louis Acad. 5: 364. 1889.

A glabrous high-climbing shrub, with slender tough terete branches. Leaves ovate or ovate-oblong, 1'-2' long, ½'-1' wide, acute, acuminate, or obtuse and cuspidate at the apex, obtuse or somewhat truncate at the base, dark green above, paler beneath, their margins undulate and sometimes slightly revolute; veins 8-12 pairs; petioles slender, 2"-5" long; flowers about 1½" broad, mainly in small terminal panicles; petals acute; style short; drupe 3"-4" long, equalling or shorter than its slender pedicel, its stone crustaceous.

In low woods, Virginia to Florida, Kentucky, Missouri and Texas. Rattan. March-June.

Brassica campéstris L. Turnip. Wild Navew.

Brassica campestris L. Sp. Pl. 666. 1753. Brassica Rapa L. Sp. Pl. 666. 1753.

Biennial; stem 1°-3° high, branching, glabrous and glaucous, or sometimes slightly pubescent below. Lower leaves petioled, pubescent, more or less lobed or pinnatifid; upper leaves lanceolate or oblong, acute or obtusish, sessile and clasping the stem by an auricled base, entire or dentate, glabrous; flowers bright yellow, 4"-5" broad; pedicels spreading or ascending, often I' long in fruit; pods 1½'-2' long, tipped with a beak 4"-5" long.

In cultivated grounds, sometimes persisting for a year or two, and occasional in waste places eastward. Fugitive from Europe. Summer-rape. Nape. Bergman's-cabbage. Cole-seed. April-Oct. Consists of many races.

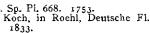
Brassica nìgra (L.) Koch. Black Mustard.

Sinapis nigra L. Sp. Pl. 668. 1753. Brassica nigra Koch, in Roehl, Deutsche Fl. Ed. 3, 4: 713. 1833.

Annual, erect, 2°-7° high, freely and widely branching, pubescent or glabrate. Lower leaves slender-petioled, deeply pinnatifid, with I terminal large lobe and 2-4 smaller lateral ones, dentate all around: upper leaves shorter-petioled or sessile, pinnatifid or dentate, the uppermost reduced to lanceolate or oblong entire blades; flowers bright yellow, 3"-5" broad; pedicels slender, appressed, 2" long in fruit; pods narrowly linear, 4-sided, 5"-7" long, \frac{1}{2}" wide, appressed against the stems and forming very narrow racemes; beak slender, 1"-2" long; seeds dark brown.

In fields and waste places, common throughout our area, except the extreme north, west to the Pacific Coast, Bermuda. Naturalized from Europe. Native also of Asia. Cadlock. Warlock. Kerlock. Scurvy-senvie. June-Nov.







Brassica júncea (L.) Cosson. Indian Mustard.

Sinapis juncea L. Sp. Pl. 668. 1753. B. juncea Cosson, Bull. Soc. Bot. Fr. 6: 609. 1859. Annual, pale, glabrous, or slightly pubescent, somewhat glaucous, stem erect, usually stout, 1°-4° tall. Lower leaves runcinate-pinnatifid and dentate, long-petioled, 4'-6' long, the uppermost sessile or nearly so, lanceolate or linear, commonly entire, much smaller; flowers 6"-9"

wide; fruiting racemes sometimes 1° long; pods erect or nearly so, on slender ascending pedicels 3"-5" long, not appressed to the axis, 1'-2' long, more than I" wide, the conic-subulate beak onefourth to one-third the length of the body.

In waste places. New Hampshire to Pennsylvania, Michigan, Kansas and Virginia. Adventive or naturalized from Asia. May-July.

Callirhoë involucràta (T. & G.) A. Gray. Purple Poppy-Mallow.

Nuttallia involucrata Nutt.; Torr. Ann. Lyc. N. Y. 2: 172. Name only. 1828.

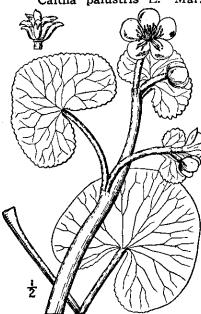
Malva involucrata T. & G. Fl. N. A. 1: 226. 1838.

Callirhoë involucrata A. Gray, Mem. Am. Acad. (II.) 4: 16. 1848.

Perennial, branched from a deep root, procumbent or ascending, 1°-2° long, pubescent with long hispid hairs. Leaves cordate-orbicular, palmately lobed or palmatifid, the lobes obtuse or acute, dentate or incised, those of the upper leaves commonly narrower than those of the lower; stipules ovate, conspicuous; peduncles terminal and axillary, slender, 1-flowered; bractlets of the involucel 3, linear, half the length of the lanceolate acute 3-5-nerved calyx-lobes; flowers red-purple, 1'-2½' broad; carpels rugose-reticulate.

In dry soil, Minnesota and Iowa to Texas, Utah and New Mexico and northern Mexico. April-Aug.

Caltha palústris L. Marsh-marigold. Meadow-gowan.

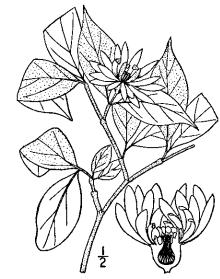


Caltha palustris L. Sp. Pl. 558. 1753.

Stout, glabrous, stem hollow, erect or ascending, 1°-2° high, branching and bearing several flowers. Basal leaves on long and broad petioles, cordate or reniform, 2'-7' wide, with a narrow sinus, entire, crenate or dentate, the upper shorter-petioled or sessile, with nearly truncate bases; flowers bright yellow, 1'-1½' broad; sepals oval, obtuse; follicles 3-12 or even more, compressed, 5"-6" long, slightly curved outward, many-seeded.

In swamps and meadows, Newfoundland to South Carolina, west to Saskatchewan and Nebraska. Ascends to 2500 ft, in Virginia. Locally called cowslip and used as a spring vegetable. April-June. Old English names, water-dragon, water-, mire-, horse- or may-blobs. Meadow-buttercups. American or spring cowslips. Capers. Cow-lily. Crowfoot. Coltsfoot. King-cup. Open or water gowan. Soldiers-buttons. Palsy-wort. Great bitter-flower. Meadow-bouts. Boots. Crazy-bet. Gools. Bull-flower. Drunkards. Water-goggles.

Caltha radicans Forst., which roots at the lower nodes of the stem, and has somewhat smaller flowers, is apparently a race of this species, mostly of high boreal range.

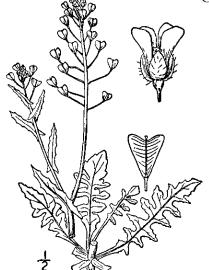


Calycanthus flóridus L. Hairy Strawberryshrub.

Calycanthus floridus L. Syst. Ed. 10, 1066. 1759. Buettneria florida Kearney, Bull. Torr. Club 21: 175. 1894.

A branching shrub, 2°-9° high, the branchlets and petioles pubescent. Leaves ovate or oval, acute or obtuse, narrowed at the base, soft-downy or pubescent beneath, rough above; flowers dark purple, about 1' broad, with a strong odor of strawberries when crushed; sepals and petals linear or oblong, pubescent, acutish or blunt, 6″-10″ long; fruit obovoid or oblong; seeds about 5″ long.

In rich soil, Virginia and North Carolina to Florida, Alabama and Mississippi. Freely planted for ornament. Spice-bush. Sweet shrub. Sweet bubby or betties, Strawberry-bush. April-Aug.



Capsella bursa-pastoris (L.) Medik.

Shepherd's-purse, -bag or -pouch.

Thlapsi Bursa-pastoris L. Sp. Pl. 647. 1753. B. pastoris Weber in Wigg. Prim. Fl. Holst. 47. 1780. Capsella Bursa-pastoris Medic. Pfl. Gatt. 1: 85. 1792. Bursa Bursa-pastoris Britton, Mem. Torr. Club 5: 172. 1894.

Erect, branching, 6'-20' high from a long deep root, pubescent below, mainly glabrous above. Basal leaves more or less lobed or pinnatifid, forming a large rosette, rarely entire, 2'-5' long; stem-leaves few, lanceolate, auricled dentate or entire, flowers white, about I" long; pedicels slender, spreading or ascending, 5"-7" long in fruit; pods triangular, cuneate at the base, truncate or emarginate at the apex, 2"-4" long; seeds 10 or 12 in each cell.

In fields and waste places, very common. Naturalized from Europe, and widely distributed as a weed over all parts of the globe. Consists of several races. Jan.-Dec. Other names are St. James'-weed, case-weed, mother's heart. Pick-purse, Pick-pocket. Lady's-purse. Witches'-pouches. Shovel-weed, Wind-flower. Pepper-plant. Toothwort. Toywort.



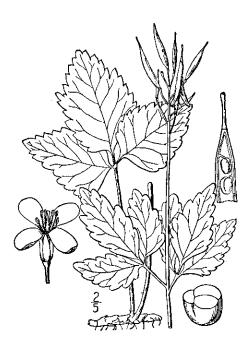
Cardamine concatenata (Michx.) Sw.

Cut-leaved Toothwort or Pepper-root.

D. laciniata Muhl.; Willd. Sp. Pl. 3: 479. 1800. Cardamine laciniata Wood, Bot. & Fl. 38. 1870. Dentaria furcata Small, Fl. SE. U. S. 480. 1903.

Erect, pubescent or glabrous, 8'-15' high; rootstock deep, tubercled, jointed, the joints readily separable. Leaves all petioled, 2'-5' broad, those of the stem generally 3 and approximate or verticillate, rarely distant, 3-parted nearly to the base; divisions lanceolate, linear or oblong, the lateral ones often deeply 2-cleft, all incisely toothed or lobed, or the lateral ones entire; basal leaves similar, rarely developed at flowering time; pedicels stout, 8"-10" long in fruit; flowers 7"-9" broad, white or pink; pods linear, ascending, 1'-1½' long.

In moist or rich woods, Quebec to Florida, west to Minnesota, Kansas and Louisiana. Purple-flowered toothwort. Crow-foot, Crow-toes. April-



Cardamine diphylla (Michx.) Wood

Two-leaved Toothwort.

D. diphylla Michx, Fl. Bor. Am. 2: 30. 1803. Cardamine diphylla Wood, Bot. & Fl. 37. 1870.

Stout, erect, simple, glabrous, 8'-14' high; rootstock continuous, toothed. Basal leaves long-petioled, 4'-5' broad, ternate, the divisions short-stalked, broadly ovate, dentate, or somewhat lobed, about 2' long; stem-leaves generally 2, opposite or nearly so, similar, shorter petioled and sometimes slightly narrower, ovate or ovate-lanceolate; pedicels 1'-1½' long; flowers white, 6"-8" broad; pods 1' long or more.

In rich woods and meadows, Nova Scotia and New Brunswick to Minnesota, south to South Carolina and Kentucky, Crinkle-root. Trickle. Two-toothed pepper-root. May.

Dentaria anómala Eames, known only from Connecticut, growing with this species and *D. laciniata*, is probably a hybrid between them.

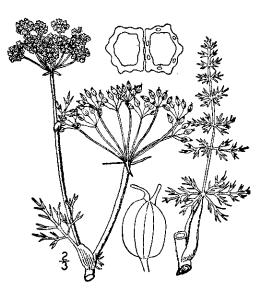
Carum Càrui L.

Caraway. Carvies.

Carum Carui L. Sp. Pl. 263. 1753.

Biennial or sometimes perennial, erect, branching, 1°-2° high. Lower and basal leaves long-petioled, the uppermost nearly sessile, all pinnatisected into linear or filiform segments; bases of the petioles widely dilated; involuce of 1-3 linear bracts, or none; involucels commonly none; umbels 1'-2½' broad, 7-10-rayed; rays ½'-2' long in fruit; fruit oblong, usually slightly curved, about 2" long, the ribs conspicuous when mature; flowers white.

Occasional in waste places, Newfoundland to South Dakota, Pennsylvania and Colorado. Adventive from Europe, May-July,



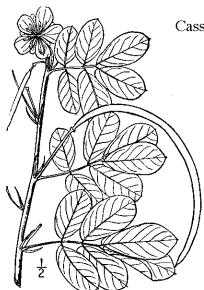


Cassia marilándica L. Wild or American Senna.

Cassia marilandica L. Sp. Pl. 378. 1753.

Perennial, glabrous or pubescent with a few scattered hairs, 3°-8° high, little branched. Stipules subulate-linear, caducous; leaves petioled, the clubshaped gland borne near the base of the petiole; leaflets 12-20, oblong or lanceolate-oblong, obtuse or obtusish, mucronate, rounded at the base, ciliate, 1'-2' long, 3"-6" wide; flowers 7"-9" broad, numerous in pubescent axillary racemes on the upper part of the plant; calyx-lobes ovate or oblong, obtuse; stamens 10, the upper 3 imperfect; pod linear, flat, pubescent or becoming glabrous, 3'-4' long, 3" wide, curved, its segments as long as broad or slightly longer; seeds flat, suborbicular.

In swamps and wet soil, Massachusetts to North Carolina, Ohio and Tennessee. July-Aug.



Cassia obtusifolia L. Low Senna.

Cassia Tora L. Sp. Pl. 376. 1753.

Cassia obtusifolia L. Sp. Pl. 377. 1753.

Annual, glabrous, 1½°-2° high, branched or simple. Stipules linear-subulate, at length deciduous; leaves petioled, the gland borne between or above the lowest pair of leaflets; leaflets 2-4 pairs, thin, obovate, obtuse and mucronulate at the apex, narrowed or rounded at the base, 1'-1½' long, often 1' wide; flowers 6"-12" broad, few, in short axillary racemes; calyx-lobes oblong, obtuse; stamens 10, the anthers of the upper 3 imperfect; pod linear, very slender, strongly curved, 4'-6' long, about 1½" wide.

Along rivers, southern Pennsylvania to Indiana and Missouri, south to Florida and Mexico, and throughout tropical America and the warmer parts of the Old World. Sickle-senna. Coffee-weed. July-Oct.

Caulophyllum thalictroides (L.) Michx. Blue Cohosh.

Leontice thalictroides L. Sp. Pl. 312. 1753.

C. thalictroides Michx. Fl. Bor. Am. 1: 205. 1803.

Glabrous, glaucous when young, 1°-3° high, with 2 or 3 large sheathing bracts at the base, a large triternate nearly sessile leaf near the summit, and generally a smaller similar one near the base of the inflorescence. Divisions of the leaves long-petioled, ternately or pinnately compound, the ultimate segments thin, 1'-3' long, oval, oblong or obovate, 3-5-lobed near the apex; paniele terminal, 2'-3' long; flowers greenish purple, 4"-6" broad; seeds globular, 4" in diameter, glaucous, borne on stout stalks about 3" long.

In woods, New Brunswick to South Carolina, west to Manitoba, Tennessee, Nebraska and Missouri. Ascends to 5000 ft. in North Carolina. April-May. Blueberry. Blue-ginsing. Blueberry-, squaw- or papoose-root.

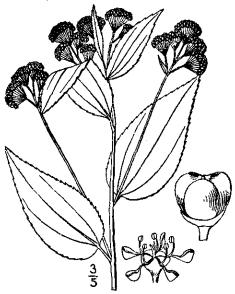


Ceanothus americanus L. New Jersey Tea. Red-root.

Ceanothus americanus L. Sp. Pl. 195. 1753.

Stems erect or ascending, branching, several commonly together from a deep reddish root, puberulent, especially above. Leaves ovate or ovate-oblong, 1'-3' long, ½'-1' wide, acute or acuminate at the apex, obtuse or subcordate at the base, finely pubescent, especially beneath, serrate all around, strongly 3-nerved; petioles 2"-5" long; peduncles terminal and axillary, elongated, often leafy, bearing dense oblong clusters of small white flowers; pedicels 3"-6" long, white; claws of the petals very narrow; fruit depressed, about 2" high, nearly black.

In dry open woods, Maine to Ontario, Manitoba, south to Florida and Texas. May-July. Ascends to 4200 ft. in North Carolina. An infusion of the leaves was used as tea by the American troops during the Revolution. Also called Wild snowball. Spangles. Walpole-tea. Wild pepper. Mountain-sweet.



Ceanothus herbaceus Raf.

Ceanothus ovatus Desf. Hist, Arb. 2: 381, 1809.

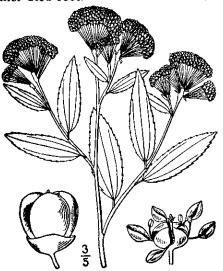
Ceanothus ovalis Bigel. Fl. Bost. Ed. 2: 92. 1824.

C. ovatus pubescens T. & G.; S. Wats, Bibl. Index 1: 166. 1878.

Similar to the preceding species, but generally a smaller shrub and nearly glabrous throughout, or western races densely pubescent. Leaves oblong, or oval-lanceolate, 1'-2' long, 3"-9" wide, mainly obtuse at each end, but sometimes acute at the apex, glabrous, or with a few hairs on the principal veins, serrate with prominently gland-tipped teeth; peduncles short, nearly always terminal, bearing dense short clusters of white flowers; pedicels slender, 4"-7" long; fruit nearly as in C. americanus.

In rocky places and on prairies, Vermont and Onterio to Minnesota, Manitoba, the District of Columbia, Illinois and Texas. Rare or absent along the Atlantic coast. May-June.





Celastrus scándens L. Shrubby or Climbing Bittersweet. Waxwork.
Staff-tree.

?Celastrus bullatus L. Sp. Pl. 196. 1753. Celastrus scandens L. Sp. Pl. 196. 1753.

A twining woody vine, ascending trees to a height of 25° or more, or trailing on the ground where it lacks support. Leaves alternate, somewhat 2-ranked by the twisting of the stem, ovate, oval or obovate, 2'-4' long, 1'-2' wide, glabrous on both sides, acuminate or acute at the apex, acute or rounded at the base, crenulate, petioles 6"-9" long; flowers greenish, about 2" broad, in terminal compound racemes 2'-4' in length; petals crenate, much longer than the calyx-lobes; capsule yellow, or orange, 5"-6" in diameter, opening in autumn and exposing the showy red aril.

In rich soil, Quebec to North Carolina, especially along the mountains, west to Manitoba, Kansas and New Mexico. Foliage sometimes variegated. June, Staff-vine. Fever-twig. False bitter-sweet. Climbing orange-toot. Roxbury wax-work. Jacob's-ladder.

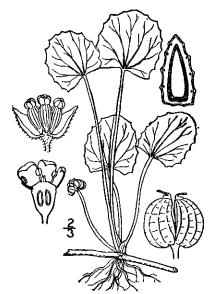


Centella asiática (L.) Urban. Ovateleaved Marsh-Pennywort.

Hydrocotyle asiatica L. Sp. Pl. 234. 1753. Hydrocotyle repanda Pers, Syn. 1: 302. 1805. C. asiatica Urban in Mart. Fl. Bras. 11: 287. 1879. Centella repanda Small, Fl. SE. U. S. 859. 1903.

Stem creeping, glabrous or somewhat pubescent, I'-6' long. Petioles 3'-12' long, sometimes pubescent; blades ovate, rather thick, very obtuse and rounded at the apex, broadly cordate at the base, not peltate, I'-1½' long, 9"-15" wide, repand-dentate; pedicels much shorter than the leaves, ½'-2' long; umbels capitate, 2-4-flowered, subtended by 2 ovate bracts; flowers nearly sessile; fruit 2"-2½" broad, about 1½" high, prominently ribbed and reticulated when mature.

In wet grounds, Maryland to Florida, west to Texas. Also in Bermuda, insular and continental tropical America, and Old World tropics. June-Sept.



Cerastium alpinum L. Alpine Chickweed.

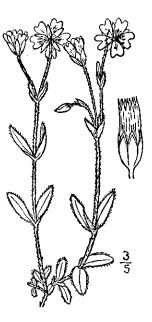
Cerastium alpinum L. Sp. Pl. 438. 1753.

Cerastium Fischerianum Ser. in DC. Prodr. 1: 419. 1824.

Cerastium alpinum Fischerianum T. & G. Fl. N. A. 1: 188. 1838.

Perennial, generally silky-hairy, sterile stems prostrate, flowering stems erect, 2'-12' high. Lower leaves somewhat oblanceolate or spatulate, dense, 2"-4" long, obtuse; upper leaves distant, ovate-oblong, obtusish, 4"-8" long; flowers solitary or 2-3, 6"-9" broad; pedicels slender; petals 2-lobed, twice the length of the lanceolate acute scarious-tipped sepals; pod longer than the calyx, nearly straight.

In moist, rocky places Gaspé, Quebec; Greenland, Labrador and in arctic America to Alaska. Also in arctic and alpine Europe and Asia. Consists of numerous races, differing in size of the plant, size of the flowers, character and amount of pubescence. Summer.

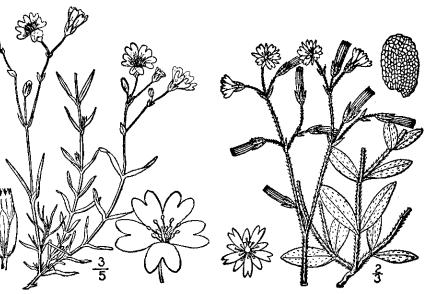


Cerastium arvénse L. Field or Meadow & Chickweed.

Cerastium arvense L. Sp. Pl. 438. 1753.

Perennial, densely tufted, erect or ascending, pubescent or nearly glabrous, flowering stems simple or sparingly branched, 4'-10' high. Basal leaves and those of the sterile shoots linear-oblong, close, slightly narrowed at the base; stem-leaves distant, linear or narrowly lanceolate, 5"-15" long, 1"-2" wide, acute; flowers several, cymose, 6"-8" broad; pedicels slender, erect; petals obcordate, much exceeding the lanceolate acute sepals which equal or are a little shorter than the slightly oblique pod.

In dry, rocky places, Labrador to Alaska, south to Georgia, Missouri, Nevada and California. Also in Europe and Asia. April-July.



Cerastium vulgàtum L. Larger Mouseear Chickweed.

Cerastium vulgatum L. Sp. Pl. Ed. 2, 627. 1762.

Cerastium triviale Link, Enum. Hort. Ber. 1: 433. 1821.

Biennial or perennial, viscid-pubescent, tufted, erect or ascending, 6'-18' long. Lower and basal leaves spatulate-oblong, obtuse; upper leaves oblong, 6"-12" long, 3"-5" wide, acute or obtuse; bracts scarious-margined; inflorescence cymose, loose, the pedicels at length much longer than the calyx; sepals obtuse or acute, about equalling the 2-cleft petals, 2"-3" long; capsule curved upward.

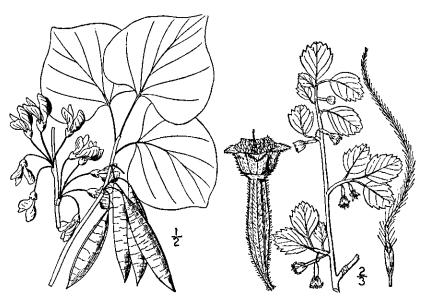
In fields and woods, nearly throughout our area. Naturalized from Europe. Often a troublesome weed. Occours also in the Southern and Western States, and is native in northern Asia. Mouse-ear. May-Sept.

Cercis canadénsis L. Red-bud. American Iudas-tree.

Cercis canadensis L. Sp. Pl. 374. 1753.

A tree, with greatest height of about 50° and trunk diameter of 1°, or often shrubby. Stipules membranous, small, caducous; leaves simple, petioled, cordate-orbicular, blunt-pointed, rather thick, glabrous, or pubescent along the veins beneath, 2'-6' broad; flowers several together in sessile umbellate clusters, appearing before the leaves; pedicels slender, 4"-12" long; corolla pink-purple, about 4" long; pod short-stalked in the calyx, linear-oblong, acute at each end, glabrous, 2'-3' long, 6" wide, several-seeded.

In rich soil, southern Ontario and New York to Iowa, Nebraska, Arkansas, Florida and Texas. Wood hard, weak, dark reddish-brown; weight per cubic foot 40 lbs. Red Judas-tree. Salad-tree, April,



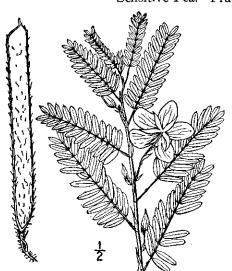
Cercocarpus montànus Raf. Small-leaved Cercocarpus.

Cercocarpus montanus Raf. Atl. Journ. 146. 1832-33. Cercocarpus parvifolius Nutt.; H. & A. Bot. Beechey Voy. 337. 1841.

A low branching shrub. Leaves obovate or oval, coriaceous, obtuse at the apex, cuneate or sometimes rounded at the base, short-petioled, dentate, silky-pubescent or canescent below, sparingly so or glabrous above, 6"-12" long, 3"-8" broad; flowers axillary, solitary or in pairs, short-peduncled, recurved, about 3" broad; calyx-tube pubescent, 4"-6" long, its limb deciduous; style becoming 2'-4' long and very plumose in fruit.

In dry or rocky soil, South Dakota to western Kansas, Montana, Wyoming, Utah and New Mexico. April-June.

Chamaecrista fasciculàta (Michx.) Greene. Partridge Pea. Large-flowered Sensitive Pea. Prairie Senna.



Cassia fasciculata Michx. Fl. Bor. Am. 1: 262.

Cassia Chamaecrista robusta Pollard, Mem. Torr. Club 21: 218. 1894.

Chamaecrista fascicularis Greene, Pittonia 3: 242.

C. fasciculata Greene; Pollard in Small, Fl. SE. Ü. S. 587. 1903.

Annual, erect or spreading, widely branched, pubescent, with spreading hairs, or nearly glabrous, 1°-2½° high. Stipules subulate-linear, persistent; leaves petioled, with a sessile gland on the petiole, sensitive; flowers 2-4 together in the axils, 1'-1½' broad, slender-pedicelled, showy, some of the petals often purple spotted; leaflets 20-30, linear-oblong or the upper lanceolate, obtuse, mucronate, inequilateral, oblique at the base, 4"-10" long, 1½"-2" wide; calyx-lobes long-acuminate; stamens 10, all perfect, 4 of the anthers yellow, 6 purple; pod linear, pubescent or glabrate, $1\frac{1}{2}'-2\frac{1}{2}'$ long, 2"-3" wide.

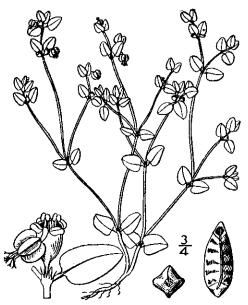
In dry soil, Massachusetts to Florida, Minnesota, Texas and Mexico. Referred to Cassia Chamaecrista L., in our first edition. Dwarf-cassia. Magoty-boy-bean. July-Sept. Chamaesyce fendleri (Torr. & Gray) Small

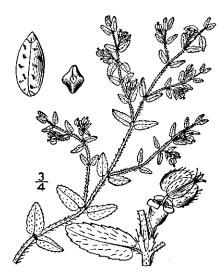
Fendler's Spurge.

Euphorbia Fendleri T. & G. Pac R. R. Rep. 2: 175. 1855. Chamaesyce Fendleri Small, Fl. SE. U. S. 710.

Annual (or perennial by a woody root), pale green, glabrous. Stem diffusely branched from the base, the spreading wiry branches 4'-8' long, brittle; leaves suborbicular, oval or elliptic, 1½"-4" long, obtuse, entire, short-petioled, the base oblique, obtuse or subcordate; stipules usually a fringe of short setae; involucres solitary in the axils, sometimes clustered toward the ends of the branches, campanulate, I"-2½" high, with 4 or 5 saucer-shaped oval glands subtended by irregular entire or slightly lobed appendages; peduncles about as long as the involucres; capsule deflexed, 1½" in diameter, sharply 3-lobed; seeds ovoid, ¾" long, transversely wrinkled.

Nebraska and Wyoming to Texas, Mexico, Utah and Arizona. April-Oct.





Chamaesyce maculata (L.) Small Milk Purslane. Spotted or Blotched Spurge.

Euphorbia maculata L. Sp. Pl. 455. 1753. Chamaesyce maculata Small, Fl. SE. U. S. 713. 1903.

Annual, dark green, puberulent or pilose. Stem branched from the base, the branches slender, radiately spreading, prostrate, 2'-15' long, often dark red; leaves usually blotched, oblong or ovate-oblong, 2"-8" long, obtuse, more or less serrate, short-petioled, the base oblique, subcordate; stipules a fringe of setae; involucres solitary in the axils, entire, ½" long, with 4 cup-shaped glands, the appendages narrow, white or red, crentlate; peduncles shorter than the involucres; capsule ovoid-globose, about 1" in diameter, pubescent; seeds ovoid-oblong, obtusely angled, minutely pitted and transversely wrinkled.

Dry soil, New England to Ontario, Wyoming, Florida and Texas. California. Apparently introduced west of the Rocky Mountains. Spotted or black pusley. Black spurge. Spotted eyebright. Milkweed, Inne-Nov.

Chamaesyce serpyllifolia (Pers.)

Thyme-leaved Spurge.

Euphorbia serpyllifolia Pers. Syn. 2: 14. 1807. Chamaesyce serpyllifolia Small, Fl. SE. U. S. 712. 1903.

Annual, dark green, or becoming reddish, glabrous. Stem branched from the base, the slender branches prostrate or ascending, 4-12' long; leaves oblong to spatulate, 1½"-6" long, obtuse or retuse, nearly entire, or serrulate to below the middle, short-petioled, the base oblique, mostly truncate or obtuse; stipules at length a fringe of weak setae; involucres solitary in the axils, sometimes clustered toward the ends of the branchlets, less than I" long, bearing 4 disk-like glands each subtended by a narrow lobed appendage; capsule I" broad, slightly nodding; seeds ovoid, hardly ½" long, 4-angled, the faces transversely wrinkled and pitted.

In dry soil, Michigan and Wisconsin to South Dakota, Idaho, Washington, California, south to Missouri, Texas and Mexico. May-Sept.



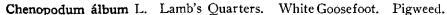


Chelidonium majus L. Celandine.

Chelidonium majus L. Sp. Pl. 505. 1753.

Weak, 1°-2° high, sparingly pubescent. Leaves thin, 4′-8′ long, glaucous beneath, 1-2-pinnatifid, the segments ovate or obovate, crenate or lobed; petioles often dilated at the base; flowers 6″-8″ broad, in axillary pedunculate umbels; petals rounded; pedicels slender, 2″-6″ long, elongating in fruit; capsule glabrous, 1′-2′ long, tipped with the persistent style and stigma.

Waste places, roadsides and even in woods, Maine to Ontario, Pennsylvania, and North Carolina. Naturalized or adventive from Europe. Summer. Called also greater celandine, to distinguish it from Ficaria, the small or lesser celandine. Swallow-wort. Tetterwort. Killwort. Wartwort. April-Sept.





Chenopodium album L. Sp. Pl. 219. 1753. Chenopodium viride L. Sp. Pl. 219. 1753. C. Berlandieri Moq. Enum. Chenop. 23. 1840. C. paganum Reichenb. Fl. Germ. 579. 1830. Chenopodium album viride Moq. in DC. Prodr. 13²: 71. 1849.

Annual, stem striate and grooved at least when dry, erect, commonly branched, 1°-10° tall. Leaves rhombic-ovate or the upper lanceolate or linear-lanceolate, narrowed at the base, acute, cuspidate or sometimes obtuse at the apex, 3-nerved, white-mealy beneath or sometimes green on both sides, dentate, sinuate lobed, or entire, 1'-4' long; petioles often as long as the blades; spikes terminal and axillary, often panicled; calyx about ½" broad in fruit, its segments strongly keeled, usually completely enclosing the utricle; styles short, seed horizontal, black, shining, firmly attached to the pericarp; embryo a complete ring.

In waste places, A common weed throughout North America except the extreme north. Naturalized from Europe. Native also of Asia, Wild spinach. Frostblite. Baconweed. Muckweed. Fat-hen. June-Sept. Consists of many races.

Chenopodium ambrosioides L. Mexican Tea.



Chenopodium ambrosioides L. Sp. Pl. 219. 1753. Chenopodium anthelminticum L. Sp. Pl. 220. 1753. Chenopodium ambrosioides var. anthelminticum A. Gray, Man. Ed. 5, 408, 1867.

Annual or southward perennial, glabrous or slightly glandular-pubescent, green, not mealy, strong-scented, stem much branched, ascending or erect, leafy, 2°-3½° high, angular and grooved. Leaves ovate, oblong, or lanceolate, obtuse or acute at the apex, petioled, repand-dentate, undulate, coarsely dentate, incised, or the upper entire, 1'-5' long, the upper numerous and much smaller; flowers in small dense axillary often leafy spikes, mostly shorter than the subtending leaves; calyx usually 3-parted, completely enclosing the fruit; pericarp readily separable from the seed; seed horizontal or vertical, shining; embryo an incomplete ring.

In waste places, Maine and Ontario to Florida, west across the continent to California. Naturalized from tropical America. Introduced as a weed also into southern Europe and Asia. Consists of numerous races, the spikes leafy to leafless. Aug-

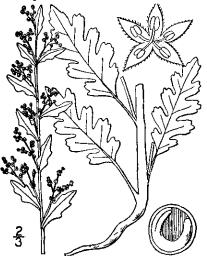
Chenopodium Bòtrys L. Feather Geranium. Jerusalem Oak.

Chenopodium Botrys L. Sp Pl. 219. 1753.

Annual, green, glandular-pubescent and viscid, strong-scented; stem slender, erect, simple or branched 8'-2' tall. Leaves ovate or oblong, deeply and usually irregularly pinnately lobed, acute or obtuse at the apex, petioled, 1'-2' long, or the uppermost much smaller, the lobes mostly obtuse and dentate; flowers in numerous loose axillary cymose panicles mostly longer than the leaves; calyx 3-5-parted, the segments lanceolate, acute, thin, very pubescent, rather longer than the utricle; seed horizontal or vertical, firmly attached to the pericarn; embryo an incomplete ring.

In waste places, Nova Scotia to Minnesota and Washington, southeastern New York, Kentucky and Mexico. Naturalized from Europe. Native also of Asia. The leaves fall in autumn, leaving the panicles as narrow naked wands. Turnpike-geranium, Hindheal. Ambrose. July-Sept.

Chenopodium incisum Poir., of tropical America, with puberulent flowers and acute leaf-lobes is reported as established in Maine.



Chionanthus virginica L. Fringe-tree.

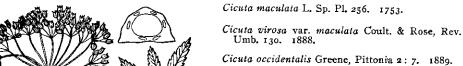
Chionanthus virginica L. Sp. Pl. 8. 1753.

A shrub, or small tree, reaching a maximum height of about 35° and trunk diameter of about 8', the young twigs, petioles and lower surfaces of the leaves pubescent, or sometimes glabrate. Leaves oval, oblong or some of them obovate, rather thick, acute, short-acuminate to obtuse at the apex, narrowed at the base, 3'-6' long, 1'-3' wide; the blade more or less decurrent on the petiole; panicles drooping, sometimes 10' long, usually with some sessile oblong leaf-like bracts, its branches and the pedicels very slender; petals I' long or more, I'' wide or less; drupe oblong or globose-oblong, nearly black, 5"-8" long, the pulp

In moist thickets, New Jersey and southern Pennsylvania to Florida, Missouri and Texas. Ascends to 2500 ft. in North Carolina. Wood heavy, hard, light brown; weight per cubic foot 40 lbs. Poison-, whiteor flowering-ash. White- or American-fringe. Snowflower-tree. Shavings. Old-man's beard. Gray-beard-tree. May-June.



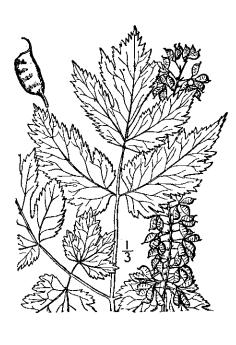
Cicuta maculàta L. Water or Spotted Hemlock. Musquash Root.



Stout, erect, branching, 3°-6° high, the stem marked with purple lines. Roots several, fleshy, tuberiform, ovoid, or oblong; leaves petioled, bipinnate, or tripinnate, the lower often 1° long, and on long petioles, the upper smaller; leaf-segments lanceolate, or lanceoblong, coarsely and sharply serrate, 1'-5' long, their veins apparently ending in the notches; umbellets many-flowered; pedicels unequal. 2"-4" long in fruit; fruit oval to suborbicular. ı"–ı½" long.

In swamps and low grounds, New Brunswick to Manitoba, south to Florida and New Mexico. Children's-bane. Musquash-poison. Wild parsnip. Snakeweed. Consists of several races, differing in width, thickness and serration of the leaf-seg-

Cimicifuga racemosa (L.) Nutt. Black Snakeroot. Black Cohosh.



Cimicifuga americàna Michx. American Bugbane.

C. americana Michx. Fl. Am. 1: 316. 1803.

Stem slender, 3°-5° high, leafy. Leaves ternate, the divisions pinnate with many of the ultimate leaflets again compound; leaflets ovate or oblong, the terminal one generally cuneate, acute, thin, glabrate, all incisely toothed, cleft or divided, 1'-3' long; racemes terminal, slender, compound, densely and finely pubescent, 1°-2° long; flowers pedicelled, 4"-6" broad; pedicels minutely bracted; petals few, 2-lobed; stamens numerous; pistils 3-8, stipitate, stigma minute; follicles inflated, membranous, 5" long, narrowed below, tipped with a short oblique subulate beak; seeds in 1 row, flattened, chaffy.

Central New York and Pennsylvania, south along the mountains to Georgia and Tennessee. Mountain rattle-top. Aug.—Sept.

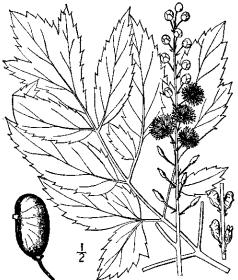
Actaea racemosa L. Sp. Pl. 504. 1753.

Cimicifuga racemosa Nutt. Gen. 2: 15. 1818.

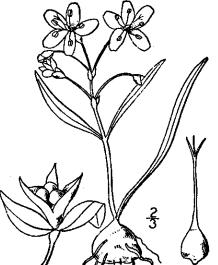
Cimicifuga racemosa dissecta A. Gray, Man. Ed. 6,
47. 1890.

Stem slender, 3°-8° high, leafy above; rootstock thick. Leaves ternate, the divisions pinnate and the ultimate leaflets often again compound; leaflets ovate or oblong, or the terminal one obovate, acute or sometimes obtusish at the apex, narrowed, truncate or the lower subcordate at base, incisely-toothed, cleft, divided, or occasionally dissected, thickish, nearly glabrous; racemes compound, terminal, 6'-3° long, usually finely pubescent; pedicels bracted; flowers 6"-7" broad, foetid; petals 4-8, 2-cleft; stamens very numerous; pistils 1 or 2, sessile; stigma broad; follicles oval, 3"-4" long, minutely beaked; seeds in 2 rows, smooth, flattened.

In woods, Maine and Ontario to Wisconsin, south to Georgia and Missouri. Ascends to 4000 ft. in North Carolina. Rich-weed. Rattle-weed.



ft, in North Carolina. Rich-weed. Rattle-weed. Rattle-snakeroot. Rattle-top or -root. June-Aug.



Claytonia virgínica L. Spring Beauty. May- or Grass-flower.

Claytonia virginica L. Sp. Pl. 204. 1753.

Ascending or decumbent, perennial from a deep tuberous root, stem 6'-12' long, simple or rarely with a few branches. Leaves elongated, linear or linear-lanceolate, obtuse or acute, narrowed into a petiole, the basal 3'-7' long, 1"-6" wide, the cauline shorter and opposite; raceme terminal, loose, at length 3'-5' long, somewhat secund; flowers white or pink, with darker pink veins, 6"-10" broad; pedicels slender, at length 1'-1½' long and recurved; petals emarginate; capsule shorter than the sepals.

In moist woods, Nova Scotia to Saskatchewan, south to Georgia, Montana and Texas. Very variable in the breadth of leaves. Ascends to 2400 ft. in Virginia, Good-morning-spring, Wild potatoes. March-May.

Clematis crispa L.

Marsh Leather-flower.

Clematis crispa L. Sp. Pl. 543. 1753.

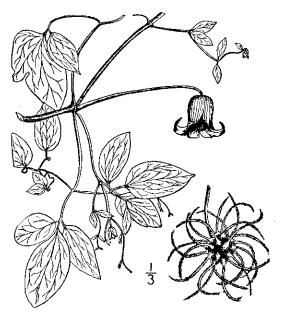
Clematis cylindrica Sims, Bot. Mag. pl. 1160. 1809.

Viorna cylindrica Spach, Hist. Veg. 7: 269. 1839.

Viorna crispa Small, Fl. SE. U. S. 437.

A climbing vine. Leaves pinnate; leaflets mostly trifoliolate, the ultimate divisions entire or occasionally lobed, glabrous and thin; flowers solitary, nodding, bluish-purple, 9"-18" long; calyx cylindric below, but the sepals thin and widely spreading above, their margins undulate; filaments hairy; persistent styles silky, not plumose.

In marshes, Pennsylvania to Missouri, Arkansas, Florida and Texas. Blue-jessamine. Blue-bell. Curl-flowered clematis. May-June.

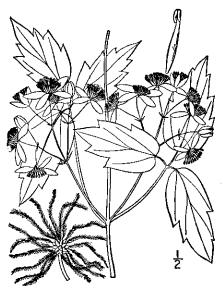


Clematis ligusticifòlia Nutt. Western Virgin's Bower.

C. ligusticifolia Nutt.; T. & G. Fl. N. A. 1:9. 1838.

A trailing and climbing vine, nearly glabrous. Leaves pinnately 5-foliolate, the lower pair of leaflets generally remote from the upper; leaflets oblong or ovate-lanceolate, acute and sometimes acuminate at the apex, rounded or cuneate at the base, toothed, lobed or divided; flowers white, in leafy panicles, 6"-9" broad when expanded, the stamens about equalling the sepals; filaments glabrous; persistent styles plumose throughout, nearly white, I'-2' long.

Western Nebraska, Missouri, and throughout the Rocky Mountain region, west to the Pacific Coast. Windflower. June-Aug.



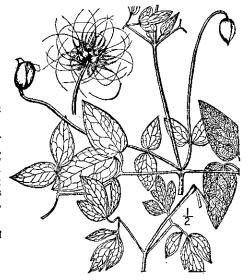
Clematis pitcheri Torr. & Gray

Pitcher's Leather-flower.

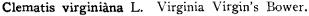
Clematis Pitcheri T. & G. Fl. N. A. 1: 10. 1838. V. Simsii Small, Fl. SE. U. S. 438. 1903. Not Clematis Simsii Sweet.

A high climbing vine, the branches more or less pubescent. Leaves pinnate; leaflets entire, lobed or trifoliolate, thick, reticulated, generally mucronate; flowers solitary; calyx campanulate, less than 1' long, purplish, pubescent; sepals with recurved margined tips; filaments hairy; persistent styles more or less pubescent, about I' long.

Southern Indiana to Missouri, Nebraska and Texas, May-Aug.



Idaho, May-July.

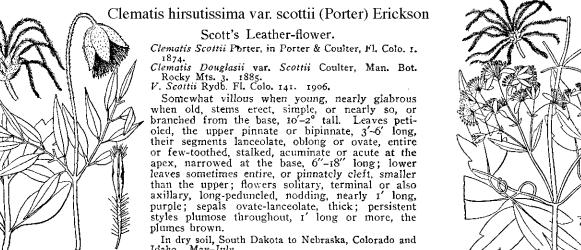


Clematis virginiana L. Amoen. Acad. 4: 275. 1759.

A long vine, climbing over bushes in low woodlands and along fences and water-courses. Leaves glabrous or nearly so, trifoliolate; leaflets mostly broadly ovate, acute at the apex, toothed or lobed, sometimes slightly cordate; flowers white, in leafy panicles, polygamo-dioecious, 8"-15" broad when expanded; filaments glabrous; persistent styles plumose, 1' long or more.

Georgia to Tennessee, northward to Nova Scotia and Manitoba. Leaves rarely 5-foliolate. Ascends to 2600 ft. in Virginia. Woodbine. Traveler's-joy. Love-vine. Devil's-hair or -darning-needle. Wild hops. July-Sept.

Clematis missouriénsis Rydb., of Missouri, Kansas and Nebraska, differs in having marginless achenes and in being more pubescent; it has been confused with C. Catesbyana Pursh, of the southern states and may be specifically distinct.

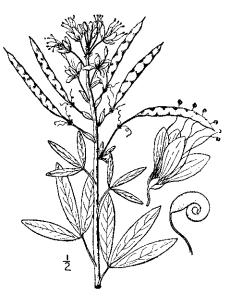


Cleome serrulàta Pursh. Pink Cleome.

Cleome serrulata Pursh, Fl. Am. Sept. 441 1814. Peritoma serrulatum DC. Prodr 1: 237 1824. Cleome integrifolia T. & G. Fl. N. A. 1: 122. 1838.

Annual, erect, glabrous, 2°-3° high, branching above. Leaves 3-foliolate, the lower long and slender-petioled, the upper sessile or nearly so; leaflets lanceolate or oblong, acute, entire or distantly serrulate, 1'-3' long; fruiting racemes greatly elongated; bracts lanceolate or linear, often mucronate; pedicels slender, spreading or recurved and 6"-10" long in fruit; stipe of the pod about equalling the pedicel; flowers pink or white, very showy; petals oblong, slightly clawed, 5"-6" long, obtuse; pods linear, acute, 1'-2' long.

Prairies, northern Illinois to Minnesota, Saskatchewan, Assiniboia, Missouri, New Mexico and Arizona. Occasional in waste grounds farther east. Rocky Mountain bee-plant. July-Sept.



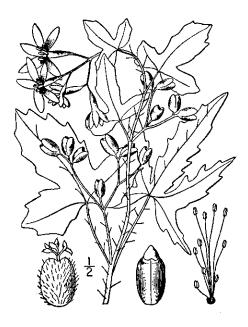


Clethra acuminàta Michx. Mountain Sweet Pepperbush.

C. acuminata Michx. Fl. Bor. Am. 1: 260. 1803.

A tall shrub or small tree, similar to the preceding species. Leaves oval, oblong, or ovate, acuminate at the apex, narrowed or rounded at the base, green above, pale and sometimes pubescent beneath, closely serrulate with very sharppointed teeth, 2'-7' long, sometimes 3½' wide; petioles 4"-12" long; racemes spreading or recurved, solitary, or 2-3 together, 2'-8' long, the rachis, pedicels and calyx densely pubescent or canescent; bracts longer than the flowers, caducous; filaments and bases of the petals hirsute; capsules pubescent.

In mountain woods, Virginia and West Virginia to Georgia. Ascends to 4500 ft. in North Carolina, July-Aug.



Cnidoscolus stimulòsus (Michx.) Engelm. & Gray. Spurge Nettle. Tread-softly.

Jatropha stimulosa Michx. Fl. Bor. Am. 2: 216. 1803.

Cnidoscolus stimulosus Engelm. & Gray, Bost. Journ. Nat. Hist. 5: 234. 1845.

Jatropha urens var. stimulosa Muell. Arg. in DC. Prodr. 15: Part. 2, 1101. 1862.

Perennial by a stout root, herbaceous, bright green, armed with stinging hairs. Stem rather slender, erect, simple or branched, 4'-3½° tall; leaves nearly orbicular in outline, 2½'-12' broad, truncate or cordate at the base, deeply 3-5-lobed, the lobes entire, toothed or pinnatifid; calyx of the staminate flowers salverform, white or pink, 10"-20" broad; capsule oblong, 5"-8" long, papillose, wrinkled; seeds oblong-obovoid, 5"-6" long, smooth, mottled.

In dry sandy soil, Virginia to Florida and Texas. Sand-nettle. Stinging-bush. March-Aug.

Cocculus carolinus (L.) DC. Carolina Moonseed.

Menispermum carolinum L. Sp. Pl. 340. 1753.

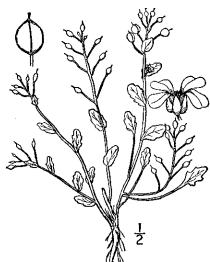
Cocculus carolinus DC. Syst. Veg. 1: 524. 1818.

Cebatha carolina Britton, Mem. Torr. Club 5: 162. 1894.

A slender vine, trailing, or climbing to the height of several feet, the stem glabrous or pubescent. Leaves broadly ovate, 2'-4' long, cordate or rounded at the base, entire or lobed, acute or obtuse, sometimes densely pubescent beneath, mainly glabrous above; petioles slender, I'-4' long; panicles axillary and terminal, loose, I'-5' long; flowers about I' broad; drupe red, laterally flattened, 2"-3" in diameter, the stone curved into a closed spiral, crested on the sides and back.

Along streams, Virginia to Illinois and Kansas, south to Florida and Texas. Red-berry moonseed. June-Aug.





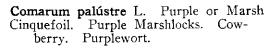
Cochlearia officinàlis L. Scurvy-grass or weed. Spoonwort.

Cochlearia officinalis L. Sp. Pl. 647. 1753.

Cochlearia oblongifolia DC. Syst. Veg. 2: 363. 1821.

Diffuse, branching, glabrous, somewhat fleshy, the branches 6'-12' long. Lower leaves long-petioled, oblong, orbicular or reniform, obtuse, ½'-1' long, dentate or entire; upper leaves ovate or oblong, sessile or short-petioled; flowers white, 2"-3" broad; petals emarginate, or entire, thrice as long as the calyx; raceme elongating in fruit; pedicels ascending, 3"-4" long in fruit; pods globose or ovoid, 2"-3" long, smooth or reticulated; valves convex, strongly 1-nerved; style ½" long.

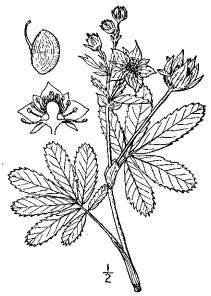
Along seacosts and rivers, Anticosti to Greenland and arctic America generally. Also in arctic Europe and Asia. Summer. A valued antiscorbutic salad.



Comarum palustre L. Sp. Pl. 502. 1753. Potentilla palustris Scop. Fl. Carn. Ed. 2, 1: 359. 1772.

Decumbent and somewhat woody at the base, the upper part of the stems pubescent. Leaves pinnate, the lower long-petioled, 5-7-foliolate; leaflets oblong or oval, sharply or incisely serrate, obtuse or acutish at the apex, narrowed at the base, Y-3' long; stipules membranous, sometimes adnate to the petiole for half its length; upper leaves nearly sessile, 3-5-foliolate; flowers showy, 9"-15" broad; calyxlobes red or purple within, ovate, acuminate, much exceeding the ovate-lanceolate petals; bractlets much shorter than the calyx-lobes; disk lobed.

In swamps and peat-bogs, Greenland and Labrador to New Jersey, Iowa, British Columbia, Wyoming, Alaska and California. Northern Europe and Asia. Marsh five-finger. Meadow-nuts. Bog-strawberry. June-Aug.



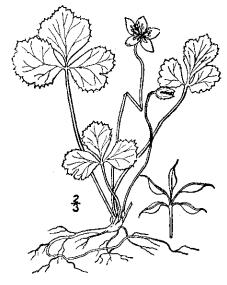
Coptis trifòlia (L.) Salisb. Gold-thread.

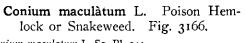
Helleborus trifolius I., Sp. Pl. Ed. 2, 784. 1762. Coptis trifolia Salisb. Trans. Linn. Soc. 8: 305. 1803.

Isopyrum trifolium Britton, Bull. Torr. Club 18: 265. 1891.

Tufted, glabrous, 3'-6' high from a slender or filiform yellow bitter rootstock. Leaves all basal, evergreen, long-petioled, the blade reniform, 1'-2' broad, 3-divided; petioles very slender; segments broadly obovate, cuneate, obtuse, prominently veined, crenate or slightly lobed, dark green and shining above, paler beneath, the teeth mucronate; scape 1-flowered, occasionally 2-flowered, slender; sepals oblong, obtuse; petals small, club-shaped; follicles 3-7, about 3" long, borne on stipes of about their own length, spreading, tipped with a beak 1"-1½" long.

In damp mossy woods, and bogs, Newfoundland to Maryland and eastern Tennessee, Iowa, Minnesota, British Columbia and Alaska. Ascends to 3500 ft. in the Adirondacks. Called also canker-root, mouthroot, yellow-root. May-Aug.





Conium maculatum L. Sp. Pl. 243.

Erect, much-branched, 2°-5° high. Lower and basal leaves petioled, the upper sessile or nearly so, all pinnately dissected, the leaflets ovate in outline, thin, the ultimate segments dentate, or incised; petioles dilated and sheathing at the base; umbels 1'-3' broad, the rays slender, 1'-1½' long; pedicels filiform, 2"-3" long in fruit; flowers about 1" broad; fruit 1½" long, about 1" wide, its ribs very prominent when dry.

In waste places, Nova Scotia to Ontario, Delaware, Indiana and Michigan. Also in California and Mexico, Santo Domingo and South America. Naturalized from Europe. St. Bennet's-herb. Cashes. Wode-whistle. Poison or spotted parsley. Bunk. June-July.

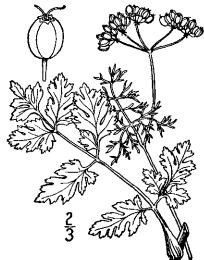


Coriandrum sativum L. Coriander.

Coriandrum sativum L. Sp. Pl 256. 1753.

Erect, 2° high or less. Lower leaves pinnately divided, their segments broad, ovate to obovate, variously toothed and cleft; upper leaves pinnately decompound, with narrowly linear segments; flowering umbels 1'-2' broad, the rays slender; pedicels 1"-2" long; involucel-bracts deciduous; fruit about 2" long and thick, its acutish ribs narrower than the intervals between them.

Waste grounds, eastern Massachusetts to Pennsylvania and North Carolina; South Dakota, and in the Western States. Adventive from the Old World. May-July.

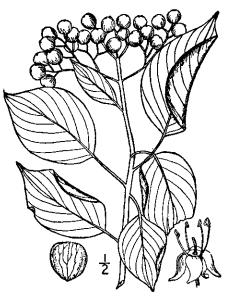


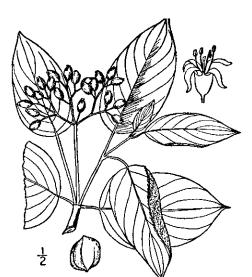
Cornus alternifòlia L. f. Alternate-leaved Cornel or Dogwood.

Cornus alternifolia L. f. Suppl. 125. 1781.

A shrub, or small tree, with smooth greenish bark, reaching a maximum height of about 30° and trunk diameter of 8'. Leaves slenderpetioled, alternate, clustered near the ends of the branches, oval or ovate, acuminate at the apex, narrowed or sometimes rounded at the base, 2'-4' long, pale and appressed-pubescent beneath, glabrate above, the margins minutely denticulate; petioles ½'-1½' long; cymes 2'-4' broad, pubescent; petals white, or cream-color, lanceolate; fruit globular, or slightly depressed, blue, rarely yellow, about 4" in diameter; stone somewhat obovoid, channeled, scarcely flattened.

In woods, Miquelon Island and Nova Scotia to Georgia, Ontario, Minnesota, West Virginia. Alabama and Missouri. Ascends to 2500 ft. in Virginia. Wood hard, reddish brown; weight per cubic foot 42 lbs. Blue or purple dogwood. Umbrella-tree. Green osier. Pigeon-berry. May-July.





Cornus Amòmum Mill. Silky Cornel. Kinnikinnik.

C. Amomum Mill. Gard. Dict. Ed. 8, no. 5, 1768. Cornus sericea I.. Mant. 2: 199, 1771. C. obliqua Raf. Ann. Nat. 13. 1820. C. Purpusi Koehne, Gartenflora 1890: 388.

A shrub, 3°-10° high, with purplish twigs, the youngest commonly pubescent. Leaves petioled, ovate, oval, or ovate-lanceolate, acuminate at the apex, narrowed or rounded at the base, usually finely pubescent with brownish hairs beneath, glabrous or minutely appressed-pubescent above, 1'-5' long; flowers white, in rather compact flat cymes 1½'-2½' broad; petals narrowly oblong; fruit globose, light blue, 3"-3½" in diameter, stone oblique, ridged, narrowed or pointed at base.

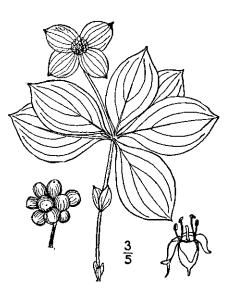
In low woods and along streams, Newfoundland to Ontario, Florida, North Dakota, Nebraska and Texas, Swamp dogwood, Blueberry-cornell, Redosier; red-brush or -willow, Rose-willow, Squawbush. May-July.

Cornus canadensis L.

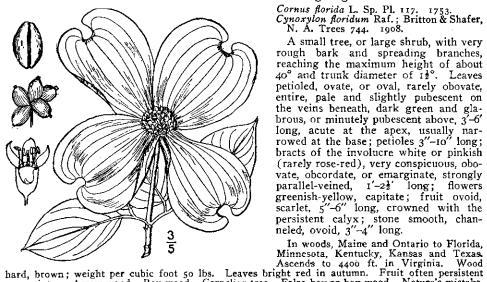
Low or Dwarf Cornel. Bunch-berry or -plum.

Cornus canadensis L. Sp. Pl. 117. 1753. C. unalaschensis Ledeb. Fl. Ross. 2: 378. 1844-46. C. canadensis Rydb. Bull. Torr. Club 33: 147. 1906.

Herbaceous, woody only at the base; flowering stems erect, scaly, 3'-9' high. Rootstock nearly horizontal; leaves verticillate at the summit of the stem, or sometimes I or 2 pairs of opposite ones below, sessile, oval, ovate, or obovate, pinnately veined, glabrous or minutely appressed-pubescent, acute at each end, entire, I'-3' long; peduncle slender, ½'-1½' long; involucral bracts 4-6, white, petaloid, ovate, 4"-9" long; flowers greenish, capitate; petals ovate, one of them with a subulate appendage; fruit globose, bright red, about 3" in diameter; stone smooth, globose, slightly longer than broad.



Cornus florida L.



over winter, Arrow-wood, Box-wood, Cornelian tree. False box or box-wood, Nature's-mistake, Florida dogwood. White cornel. Indian arrow-wood. April-June.

Flowering Dogwood.

Cornus florida L. Sp. Pl. 117. 1753. Cynoxylon floridum Raf.; Britton & Shafer, N. A. Trees 744. 1908.

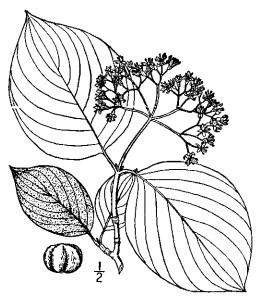
A small tree, or large shrub, with very rough bark and spreading branches, reaching the maximum height of about 40° and trunk diameter of 12°. Leaves petioled, ovate, or oval, rarely obovate, entire, pale and slightly pubescent on the veins beneath, dark green and glabrous, or minutely pubescent above, 3'-6' long, acute at the apex, usually narrowed at the base; petioles 3"-10" long; bracts of the involucre white or pinkish (rarely rose-red), very conspicuous, obovate, obcordate, or emarginate, strongly parallel-veined, 1'-2½' long; flowers greenish-yellow, capitate; fruit ovoid, scarlet, 5"-6" long, crowned with the persistent calyx; stone smooth, channeled, ovoid, 3"-4" long.

Cornus rugòsa Lam. Round-leaved Cornel or Dogwood.

Cornus rugosa Lam. Encycl. 2: 115. 1786. C. circinata L'Her. Cornus, 7. pl. 3. 1788.

A shrub, 3°-10° high, the twigs warty, green and glabrous. Leaves petioled, entire, broadly ovate, orbicular, or even wider than long, acute, or short-acuminate at the apex, mostly rounded or truncate at the base, pale and densely soft-pubescent beneath, slightly pubescent above, 2'-6' long; petioles 3"-9" long; flowers white in rather dense cymes 1½'-2½' broad, the pedicels usually somewhat pubescent; petals ovate; fruit globose, light blue, about 2½" in diameter; stone subglobose, somewhat ridged.

In shady, often rocky situations, Nova Scotia to Manitoba, south to Virginia, Illinois, Iowa and North Dakota. Alder-leaved dogwood. Green osier. May-July.



Cornus sericea L.

Red-osier Cornel or Dogwood.

C. alba Lam, Encycl. 2: 115. 1786. Not L. 1767. C. stolonifera Michx, Fl. Bor, Am. 1: 92. 1803.

A shrub, 3°-10° high, usually stoloniferous, the twigs glabrous and bright reddish purple, or the youngest finely appressed-pubescent. Leaves slender-petioled, ovate, ovate-lanceolate or oval, acute or short-acuminate at the apex, rounded or narrowed at the base, finely appressed-pubescent above, white or whitish and sparingly pubescent beneath, or sometimes glabrous on both sides, 1'-5' long; cymes 1'-2' broad, flat-topped, usually minutely appressedpubescent; petals white, ovate-oblong; fruit white to bluish, globose, 3"-4" in diameter, the stone very variable in shape, either higher than broad or broader than high.

In moist soil, Newfoundland to the Yukon Territory, Virginia, Kentucky, Nebraska, Arizona and California. Ascends to 2400 ft. in the Adirondacks. Dogberry-tree. Waxberry-cornell. Kinnik-innik, Red brush. Squaw-bush. Gutter-tree. JuneCorydalis aurea Willd.

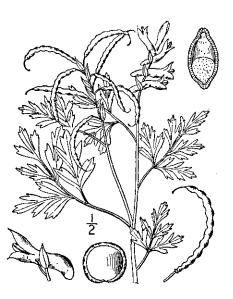
Golden Corydalis.

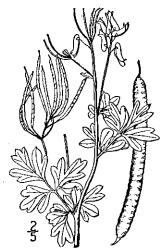
Corydalis aurea Willd. Enum. 740. 1809.

Capnoides aureum Kuntze, Rev. Gen. Pl. 14. 1891.

Glabrous, 6'-14' high, diffuse, branching. Leaves all but the uppermost petioled, finely dissected into oblong obovate or cuneate segments, mainly broader than those of related species; flowers 6" long, bright yellow; spur one-half the length of the body of the corolla, or more, rounded; outer petals keeled, not crested; pedicels short, slender; pods spreading or pendulous, torulose, especially when dry; seeds obtuse-margined, shining, obscurely reticulated.

In woods, Nova Scotia to Minnesota, Alaska, Pennsylvania and Missouri, south in the Rocky Mountains to Arizona and California. March-May.





Corydalis sempervirens (L.) Pers.

Pink or Pale Corydalis.

Fumaria sempervirens L. Sp. Pl. 700. 1753. Capnoides sempervirens Borck, in Roem, Arch. 1: Part 2, 44. 1797. Corydalis sempervirens Pers. Syn. 2: 269. 1807. Corydalis glauca Pursh, Fl. Am. Sept. 463. 1814.

Glabrous, glaucous, erect or ascending, 5'-2° high, freely branching. Lower leaves 1'-4' long, short-petioled, the upper nearly sessile, pinnately decompound, the primary divisions distant, the ultimate segments obovate or cuneate, toothed or entire, obtuse, often mucronulate; flowers numerous, panicled, borne in cymose clusters at the ends of the branches, 5"-8" long, pink or rarely white, with a yellow tip; spur rounded, about 1" long; capsules narrowly linear, erect, 1'-2' long, nodose when mature; seeds shining, minutely reticulated.

In rocky places, Nova Scotia to Alaska, Georgia, Minnesota, Montana and British Columbia. Ascends to 4500 ft. in North Carolina. Roman wormwood. April-Sept.

Crataegus chrysocàrpa Ashe. Round-leaved Thorn.

Mespilus rotundifolia Ehrh. Beitr. 3: 30. 1788.
Craiaegus rotundifolia Borckh. in Roem. Arch. 13: 87.
1798. Not Lam. Ency. 1: 84. 1783.
Crataegus chrysocarpa Ashe, Bull. N. Car. Agri. Coll.
175: 110. 1900.
C. sheridana A. Nelson, Bot. Gaz. 34: 370. 1902.
C. Doddsii Ramaley, Bot. Gaz. 46: 5: 381. 1908.

A beautiful round-topped shrub, or a tree occasionally 25° high, with numerous spines, 1'-3' long. Leaves ovate-orbicular or obovate, 1½'-2' long, ½'-2½' wide, acute at the apex, broadly cuneate at base, doubly serrate with rather coarse teeth and with 3 or 4 pairs of acute lobes, subcoriaceous, dark yellow-green and shining above, slightly pubescent or glabrous; corymbs pubescent or glabrous; flowers 7" or 9" broad; stamens 5–10; styles and nutlets usually 3 or 4; calyx-lobes lanceolate, acuminate, usually entire but glandular-margined; fruit depressed-globose to short-ovoid, about 5" thick, red; flesh soft; calyx-lobes reflexed.

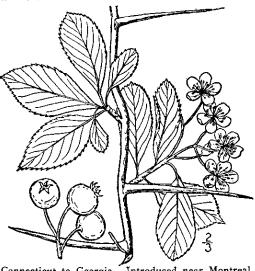
Nova Scotia and New Brunswick to Saskatchewan, south to North Carolina, Nebraska, and in the Rocky Mts. to New Mexico. May; fruit ripe August-September.

Crataegus Crús-Gálli L. Cock-spur Thorn. Newcastle Thorn.

Crataegus Crus-galli L. Sp. Pl. 476. 1753. Crataegus lucida Mill, Dict, Ed. 8, no. 6. 1768.

A small tree, sometimes 30° high, with spreading branches; spines very numerous, straight, 1'-7' long. Leaves obovate to elliptic, \(\frac{2}{3}'-4'\) long, \(\frac{1}{2}'\) wide (sometimes 2\(\frac{2}{3}'\) wide), sharply serrate, except toward the base, acute or rounded at the apex, cuneate, dark green and shining above, coriaceous, glabrous, or occasionally slightly pubescent, glandless; corymbs glabrous, or occasionally pubescent; flowers about 8" broad; stamens 10-20; anthers usually pink; calyx-lobes lanceolate; acuminate, entire; styles and nutlets usually 2; fruit ellipsoid-ovoid to subglobose, about 5" thick, greenish to red; flesh hard and dry.

Sandy soil; northern New York to Ontario, eastern Kansas, south through western Connecticut to Georgia. Introduced near Montreal, about Lake Champlain and on Nantucket Island. An extremely variable species for which many names have been proposed. May-June; fruit ripe October. Red haw. Thorn-apple, -bush or -plum. Pin-thorn. Hawthorn.

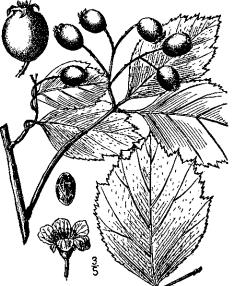


Crataegus Douglásii Lindl. Douglas' Thorn.

Crataegus punctata Jacq. var. ? brevispina Dougl.; Hook. Fl. Bor. Am. 1: 201. 1832. C. Douglasii Lindl. Bot. Reg. pl. 1810. 1835. C. brevispina Dougl.; Steud. Nom. Bot. Ed. 2: 431. 1841.

A tree or shrub, sometimes 40° high; bark dark brown and scalv. Spines 4'-1' long; twigs reddish; leaves ovate to obovate, ½'-2¾' long, 1'-21' wide, acute or obtuse at the apex, cuneate at the base, doubly serrate and lobed except near the base, dark green and appressed-pubescent above, glabrous beneath, subcoriaceous; petioles slightly winged, If'-I' long; corymbs many-flowered, glabrous or nearly so; flowers about 8" broad, calyx-lobes acute or acuminate, entire, villous above, tinged with red; stamens 10-20; anthers light yellow; styles and nutlets 3-5; fruit short-ellipsoid, 4" or 5" thick, dark purple, becoming black in drying; flesh soft, sweet; nutlets ear-shaped, roughly pitted on the inner face.

Thunder Bay Island, Lake Huron and Keweenaw Peninsula, Mich.; Michipicoten Island, Lake Superior; and far northwestward. May, June; fruit ripe August-September.



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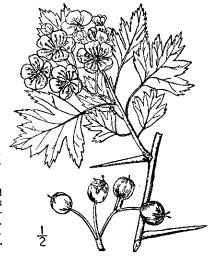
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Crataegus monógyna Jacq. Hawthorn. White or May Thorn.

C. monogyna Jacq. Fl. Aust. 3: 50. pl. 292. f. 1. 1775.

A shrub or tree, with ascending branches, sometimes 40° high and a trunk diameter of 1½°. Thorns numerous; leaves ovate, sharply 3-15-lobed or cleft, acute at the apex, cuneate to truncate at the base; serrate, ½'-1¾' long, ½'-2' wide, dark green and glabrous above when mature, paler and slightly pubescent beneath; corymbs many-flowered, glabrous; flowers white or pink, about 7" broad; calyx-lobes deltoid, entire, obtuse; stamens about 20; anthers pink; style and nutlet usually one; fruit globose or subglobose, red, about 3" thick.

Along roadsides and in thickets, sparingly escaped from cultivation. Wood hard, yellowish white; weight per cubic foot 50 lbs. Native of Europe and Asia. MayJune; fruit ripe September. Has been confused with C. Oxyacantha L. Called also English hawthorn. Hathorn. Hedge-thorn. May-bush. May. Quickset. Quick. Wick. Wicken. Haw-tree. Quickthorn.



Crataegus pruinòsa (Wendl.) K.Koch. Waxy-fruited Thorn.

C. populifolia Ell. Bot. S. C. & Ga. I: 553.
1821. Not Walt.
Mespilus pruinosa Wendl. Flora 6: 700. 1823.
C. pruinosa K. Koch, Hort. Dend. 168 1853.
C. Porteri Britton, Bull. N. Y. Bot. Gar. I: 5: 448. 1900.

A shrub or tree, sometimes 20° high, with ascending branches, an irregular crown, and numerous slender spines, $\mathbf{1'}-2\frac{1}{2'}$ long. Leaves elliptic-ovate to broadly ovate, $\mathbf{1'}-2\frac{1}{2'}$ long, $\mathbf{1'}-2\frac{1}{2'}$ wide, acute or acuminate at the apex, abruptly cuneate, rounded or occasionally cordate at the base, serrate or doubly serrate with 3 or 4 pairs of broad acute lobes towards the apex, membranous, glabrous, blue-green; corymbs glabrous; flowers about $\mathbf{10''}$ broad; stamens $\mathbf{10}-\mathbf{20}$; anthers pink or sometimes yellow; styles and nutlets usually 4 or 5; fruit depressed-globose to short-ellipsoid, strongly angled, pruinose, apple-green becoming scarlet or purple, $\mathbf{6''}-\mathbf{8''}$ thick; calyx-tube prominent, the lobes spreading, entire, persistent.

Rocky open woods, western New England to Michigan, North Carolina and Misouri. May; fruit ripe October.





Crotalaria sagittàlis L. Rattle-box.

Crotalaria sagittalis L. Sp. Pl. 714. 1753.

Annual, erect or decumbent, villous-pubescent, branching, rarely over 1° high. Leaves simple, oval, lanceolate or oblong, acute or obtusish at the apex, rounded at the base, entire, nearly sessile, $1'-2\frac{1}{2}'$ long, 2''-8'' wide; stipules persistent and united, decurrent on the stem, sagittate above, or the lower wanting; peduncles 1''-4' long, 2-4-flowered; pedicels 1''-3'' long; flowers yellow, 4''-6'' long, the corolla about equalling the calyx; pod oblong, glabrous, nearly sessile in the calyx, 1' long, 4''-5'' in thickness, much inflated, nearly black at maturity; seeds shining.

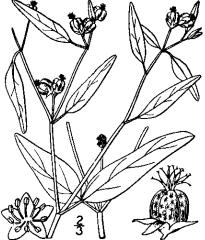
In dry open places, Vermont to Florida, Minnesota, South Dakota, Arkansas and Mexico. Also in Jamaica. June-Sept. Wild pea. Loco-weed.

Croton texénsis (Klotzsch) Muell. Arg. Texas Croton.

Hendecandra texensis Klotzch, Erichs. Arch. 1: 252. 1841. Croton texensis Muell. Arg. in DC. Prodr. 15: Part 2,

Annual, dioecious, often bronze-green, canescent with stellate pubescence. Stem rather slender, erect or assurgent, 8'-2° high, paniculately or corymbosely branched; leaves ovate to linear-oblong, or almost linear, 10''-3½' long, entire or undulate; petioles mostly shorter than the blades; staminate flowers racemose; pistillate flowers sessile or nearly so in stalked clusters; calyx equally 5-parted, the segments ovate; petals none; glands 5, minute; stamens mostly 10; styles 3, twice or thrice 2-cleft; capsule subglobose, 2½"-3" in diameter; somewhat muricate; seeds ovoid or oval, variegated, finely reticulated.

In dry soil, South Dakota to Illinois, Alabama, Wyoming and Arizona. Recorded from Delaware. Skunkweed. June-Sept.



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Cymopterus montanus Nutt. ex Torr. & Gray Mountain Cymopterus.

Cymopterus montanus T. & G. Fl. N. A. 1: 624. 1840.

Pheilopterus montanus Nutt.; Coult. & Rose, Contr. U. S. Nat. Herb. 7: 167. 1900.

Somewhat glaucous, or very slightly pubescent. Leaves I'-6' high, stout-petioled, pinnate, or bipinnate, the segments oblong, obtuse, entire, toothed, or lobed; peduncles stout, I'-6' high; involucre and involucels of broad membranous somewhat united veined bracts; umbels I'-2' broad in fruit; rays several, 3"-9" long; pedicels I"-2" long; fruit ellipsoid, 3"-6" long, the carpels broadly 3-5 winged; oil-tubes I-3 in the intervals.

Dry soil, South Dakota to western Nebraska, Wyoming, Colorado and Texas. March-April.



Cytisus scopàrius (L.) Link. Broom. Green or Scotch Broom. Hagweed. Fig. 2467.

Spartium scoparium L. Sp. Pl. 709. 1753.

Cytisus scoparius Link, Enum. Hort. Berol. 2: 241. 1822.

Sarothamnus scoparius Wimm.; Koch, Syn. Fl. Germ. 152. 1837.

Stiff, wiry, 3°-5° high, much branched, nearly glabrous. Branches elongated, straight, nearly erect, angled; lower leaves petioled, 3-foliolate, the leaflets obovate, acute, or mucronate-tipped, 3"-5" long, entire, narrowed at the base; upper leaves sessile, often 1-foliolate; stipules none; flowers bright yellow, nearly 1' long, in elongated terminal leafy racemes; pedicels solitary or 2-3 together, 3"-5" long; pod flat, glabrous on the sides, but ciliate on the margins, 1'-2' long; style slender, at length spirally curved.

In waste places, Nova Scotia to Massachusetts, Delaware and Virginia. Also in California and on Vancouver Island. Adventive or naturalized from Europe. Bannal. Besom. Summer.



Dalea aurea Nutt. ex Pursh

Golden Parosela.

Dalea aurea Nutt. Fraser's Cat. 1813.

Psoralea aurea Poir. in Lam. Encycl. Suppl. 4: 590. 1816.

P. aurea Britton, Mem. Torr. Club 5: 196. 1894.

Erect, pubescent, simple, 1°-2° high. Leaflets 5-9, sessile, rather distant, obovate, oblong or oblanceolate, obtuse at the apex, narrowed at the base, 4"-6" long, 1½"-2½" wide; spikes solitary, short-peduncled, ovoid or globose, very dense, 1'-3' long, 6"-8" thick; bracts ovate, mucronate, shorter than the densely plumose and pubescent calyx-teeth; corolla yellow, 4"-5" long; standard much shorter than the wings and keel.

Prairies, South Dakota to Missouri (?), Nebraska, Colorado and Texas. Summer.

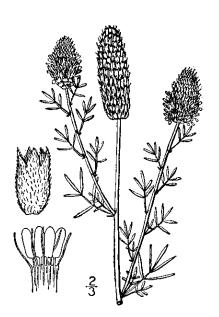
Dalea purpurea Vent.

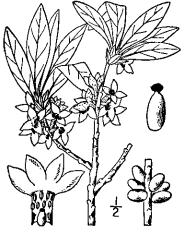
Violet or Purple Prairie-clover.

Dalea purpurea Vent. Hort. Cels. pl. 40. 1800.
Petalostemon violaceum Michx. Fl. Bor. Am. 2:50. 1803.
Dalea violacea Willd. Sp. Pl. 3: 1337. 1803.
Kuhnistera purpurea MacM. Met. Minn. 329. 1892.
P. purpureum Rydb, Mem. N. Y. Bot. Gard. 1: 238. 1900.

Glabrous or slightly pubescent, erect, 1½°-3° high, branching above. Leaves short-petioled, more or less clustered; leaflets 3-5, narrowly linear, 3″-9″ long, ½″-1″ wide, acutish and often mucronate at the apex, narrowed at the base, very short-stalked; spikes peduncled, oblong, or finally cylindric, ½′-2′ long, about 5″ thick; bracts obovate, mucronate, nearly glabrous, equalling the silky-pubescent calyx or shorter; corolla violet or purple, about 2″ long; standard cordate; wings and keel-petals oblong.

Prairies and plains, Indiana to Manitoba, Saskatchewan, Texas and Colorado. Often grows with P. candidum. July-Aug. Thimbleweed. Red tassel-flower.





Daphne Mezèreum L. Spurge Laurel. Lady Laurel. Mezereon.

Daphne Mezereum L. Sp. Pl. 356. 1753.

A shrub 1°-4° high, the young twigs somewhat pubescent. Leaves thin, deciduous, oblong-lanceolate or oblanceolate, acute or obtusish at the apex, 3'-5' long, 4"-10" wide, narrowed into short petioles; flowers in sessile fascicles of 2-5 at the nodes of twigs of the preceding season, very fragrant, expanding before the leaves or with them; perianth-tube appressed-pubescent, rose-purple or white, 6" long or less, the ovate acute lobes nearly as long; drupe red, oval-ovoid, 3"-4" long.

Escaped from cultivation, Quebec to Massachusetts, New York and Ontario. Native of Europe and Asia. Spurge-flax or -olive. Dwarf bay. Paradise- or mysterious plant. Wild pepper. April-May.

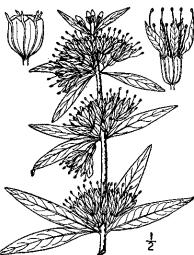
Daucus Caròta L. Wild Carrot.

Daucus Carota L. Sp. Pl. 242. 1753. Bristly-hispid, usually biennial, erect, 1°-3° high, the root fleshy, deep, conic. Lower and basal leaves 2-3-pinnate, the segments lanceolate, dentate, lobed or pinnatifid; upper leaves smaller, less divided; bracts of the involucre parted into linear or filiform lobes; umbels 2'-4' broad; rays numerous, crowded, ½'-2' long, the inner ones shorter than the outer; pedicels very slender, I"-2" long in fruit; flowers white, the central one of each umbel often purple, that of each umbellet occasionally so, all rarely pinkish; fruit 1½"-2" long, bristly on the winged ribs.



In fields and waste places, very common nearly throughout our area, often a pernicious weed. Naturalized from Europe, and native also of Asia. The original of the cultivated carrot. Bird's- or crow's-nest. Queen Anne's-lace. Bird's-nest-plant. Lace-flower. Parsnip. Devil's-plague. Rantipole. June-Sept.

Decodon verticillàtus (L.) Ell. Swamp Loosestrife or Willow-herb.



Lythrum verticillatum L. Sp. Pl. 446. 1753. Decodon aquaticus J. F. Gmel. Syst. 2: 677. 1791. Decodon verticillatus Ell, Bot. S. C. & Ga. 1: 544. 1821. Nesaea verticvillata H.B.K. Nov. Gen. 6: 191. 1823.

Aquatic, perennial, somewhat woody, with angular recurved glabrous or slightly pubescent stems 3°-10° long, which root from the tip when they reach the water or mud. Leaves lanceolate, 2′-5′ long, 4″-12″ wide, glabrous above, somewhat pubescent beneath, acute at both ends; petioles 2″-4″ long; cymes several-flowered; flowers nearly 1′ broad; petals cuneate at the base, pink-purple; filaments of the longer stamens very slender; capsule about 2½″ in diameter.

In swamps, Maine to Florida, west to southern Ontario, Minnesota, Tennessee and Louisiana. Stems clothed with parenchyma at the base. Flowers rarely double. Ascends to 2000 ft. in Pennsylvania. July-Sept. Peat- or slink-weed. Wild oleander. Grass-poly. Milk willow-herb.

Lagerstroemia indica L., crape myrtle, a large shrub with terminal panicles of showy white to purple irregular flowers, native of the East Indies is sparingly escaped from cultivation from Maryland southward.

Desmanthus illinoensis (Michx.) MacM. ex B.L. Robins. & Fern. Illinois Mimosa.

Mimosa illinoensis Michx, Fl. Bor. Am. 2: 254.
1803.

Acacia brachyloba Willid, Sp. Pl. 4: 1071. 1806.

Desmanthus brachylobus Benth. in Hook. Journ.
Bot. 4: 358. 1842.

A. illinoensis Kuntze, Rev. Gen. Pl. 158. 1891.

Ascending or erect, glabrous or nearly so, stems angled, 1°-3° high. Foliage resembling that of the preceding species, but the pinnae and obtusish leaflets are sometimes more numerous; peduncles 1'-2' long; pods numerous, densely capitate, oblong or lanceolate, strongly curved, 8"-12" long, acute, slightly impressed between the 2-5 seeds.

Prairies and river-banks, Ohio to Kentucky, Florida, South Dakota, Colorado, Texas and New Mexico. Illinois acacia. May-Sept.



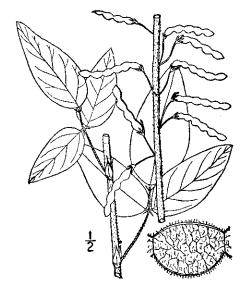
Desmodium illinoense Gray

Kuntze. Illinois Tick-trefoil.

Desmodium illinoense A. Gray, Proc. Am. Acad. 8: 289. 1870. M. illinoensis Kuntze, Rev. Gen. Pl 198. 1891.

Erect, stout, 2°-4° high, uncinate-pubescent. Stipules ovate, acute, cordate, ciliate, pubescent, persistent; petioles 1'-2' long; leaflets lanceolate or ovate-lanceolate, obtusish, coriaceous, scabrous above, strongly reticulate-veined and cinereous beneath, 2'-3½' long, the terminal one broader and longer than the lateral; racemes terminal, simple or compound; bracts deciduous, ovate-lanceolate; calyx-lobes acute, the upper one minutely 2-toothed; flowers 3"-4" long; loments ½-1' long, often in pairs, 3-6-jointed, the joints oval or orbicular, densely uncinate-pubescent; stipe not longer than the short upper lobe of the calyx.

Prairies and plains, Ontario (according to Macoun); Ohio to Michigan, Iowa, Nebraska, Kansas and Oklahoma. June-Sept.



Desmodium nudiflorum (L.) DC. Naked-flowered Tick-trefoil.

Hedysarum nudiflorum L. Sp. Pl. 749. 1753. Desmodium nudiflorum DC. Prodr. 2: 330. 1825. Meibomia nudiflora Kuntze, Rev. Gen. Pl. 197, 1891.

Slender, erect or ascending, the leaves clustered at the summit of the sterile stems, the peduncle arising from the base of the plant, leafless or rarely with 1 or 2 leaves, 3° high or less. Stipules subulate, deciduous; petioles 1'-4' long; leaflets oval or ovate, glabrous or slightly pubescent, somewhat acuminate or with a blunt point, pale beneath, 1'-3' long, the terminal one rhomboidal, the others inequilateral; panicles narrow, few-flowered; flowers rose-purple, 3"-5" long; bracts deciduous; calyx-teeth obtuse, the lowest one largest; loment 2-3-jointed, the joints longer than wide, straight or concave on the back, obliquely semi-rhomboidal, pubescent with uncinate hairs, the sutures glabrous; stipe nearly as long as the pedicel.

In dry woods, Quebec to Minnesota, Florida, Arkansas and Louisiana, July-Aug.



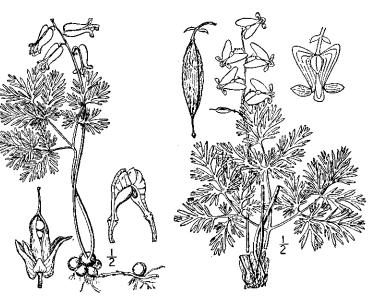
Dicentra canadensis (Goldie) Walp.

Squirrel or Turkey Corn.

Corydalis canadensis Goldie, Edinb. Phil. Journ. 6: 329. 1822. Diclytra canadensis DC. Prodr. 1: 126. 1824. Dicentra canadensis Walp. Rep. 1: 118. 1842. B. canadensis Millsp. Bull. West Va. Agric. Exp. Sta. 2: 327.

Glabrous, the rootstock bearing numerous small tubers. Leaves all basal and nearly similar to those of the preceding species, decidedly glaucous beneath; scape slender, 6'-12' high; raceme 4-8-flowered; flowers nodding, short-pedicelled, 7"-9" long, 5" broad at the base, greenish-white, purplish tinged, slightly fragrant; spurs short, rounded; inner petals prominently crested.

In rich woods, Nova Scotia to Ontario, Minnesota. Virginia, Tennessee, Missouri and Nebraska. Turkey-pea. Colic-weed. Wild hyacinth. April-June,



Dicentra cucullaria (L.) Bernh.

Dutchman's Breeches. Soldier's Cap.

Monks-hood. Breeches-flower.

Fumaria Cucullaria L. Sp. Pl. 699. 1753.
Diclytra Cucullaria DC, Syst. Yeg. 2: 108. 1821.
Dielytra Cucullaria T. & G. Fl. N. A. 1: 66. 1838.
Dicentra Cucullaria Torr. Fl. N. Y. 1: 45. 1843.
Bicuculla Cucullaria Millsp. Bull. West Va. Agric. Exp. Sta. 2: 327. 1892.

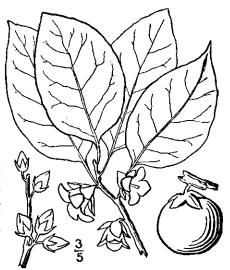
Delicate, glabrous, arising from a granulate bulbous base. Leaves all basal, pale beneath, slenderpetioled, ternately compound, the divisions stalked and finely dissected into linear or oblanceolate segments; scape slender, 5'-10' high; raceme secund, 4-10-flowered; flowers nodding, pedicelled, 6"-8" long, 8"-10" broad at the base, white, or faintly pink, yellow at the summit; spurs widely divergent; inner petals minutely crested.

In woods, Nova Scotia to Minnesota, North Carolina, Missouri and Kansas. Ascends to 4500 ft. in Virginia. Colic-weed. Bachelor's- or little-boy's-breeches. Kitten-breeches. Boys-and-girls. Indian boys-and-girls. White-hearts. Butterfly-banners. April-May.

Diospyros virginiàna L. Persimmon. Date-plum. Lotus-tree.

Diospyros virginiana L. Sp. Pl. 1057. 1753.

A tree with maximum height of about 100° and trunk diameter of 2°, usually much smaller; bark hard, dark, furrowed. Leaves ovate or oval deciduous, pubescent when young, becoming glabrous, acute or acuminate, narrowed, rounded or subcordate at the base, dark green above, pale beneath, 2′-5′ long; petioles 3″-10″ long, loosely jointed with the twigs, the leaves falling away in drying; flowers mostly 4-parted; corolla greenish yellow, that of fertile flowers 5″-7″ long, about twice as large as that of the sterile; stamens of sterile flowers about 16, those of pistillate 8 or fewer; fruit globose, about 1′ long, reddish yellow and sweet when ripe, astringent when green, ripening after frost in the northern states.



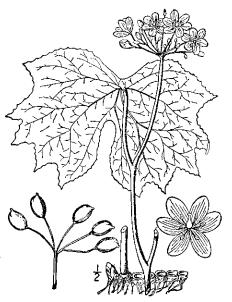
In fields and woods, Connecticut to Iowa, Kansas, Florida and Texas. Wood hard, brown; weight per cubic foot 49 lbs. Jove's-fruit. Winter- or seeded-plum. Possum-wood. May-June. Fruit Sept.- Nov.

Diphylleia cymòsa Michx. Umbrellaleaf.

D. cymosa Michx. Fl. Bor, Am. 1: 203. 1803.

Erect, stout, 1°-2° high, glabrous or nearly so Basal leaves solitary, long-petioled, 1°-2° in diameter, peltate near the center, deeply 2-cleft, many-lobed, the lobes acute or acuminate, sharply dentate; cauline leaves 2, similar, smaller, petioled, constricted in the middle and generally peltate near the margin; cyme many-flowered, 2′-3′ broad; flowers white; petals flat, oblong, obtuse; fruiting pedicels slender, 1′ long or more; berries blue, globose to oblong, 6″ long.

In woods, Virginia to Georgia and Tennessee, along the mountains, mainly at higher altitudes. May-June.

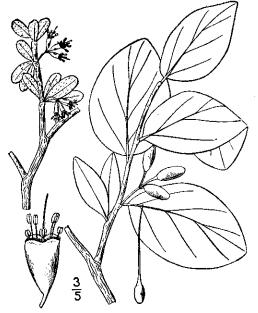


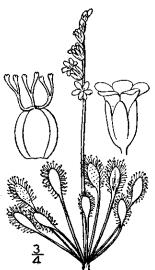
Dirca palústris L. Leather- or Leaver-wood. Moose-wood. Wicopy.

Dirca palustris L. Sp. Pl. 358. 1753.

A shrub, 2°-6° high, the twigs yellowish green, glabrous, jointed. Leaves oval, or obovate, obtuse at the apex, rounded or narrowed at the base, pubescent when young, glabrous, or very nearly so, and 2'-3' long when mature; bud-scales 3 or 4, oval, or oblong, very pubescent with brown hairs, deciduous; peduncle about 2½" long; flowers nearly sessile, expanding before the leaves; perianth 2"-3" long; style longer than the stamens; drupe about 6" long.

In woods and thickets, mostly in wet soil, New Brunswick to Ontario, Minnesota, Virginia, Tennessee, Florida and Missouri. Swamp-wood. Leather-bush. Wickup. American mezereon. Rope-bark. The bark produces violent vomiting; applied externally, it is an irritant to the skin. April-May.





Drosera intermèdia Hayne. Spatulate-leaved Sundew.

Drosera intermedia Hayne in Schrad, Journ. Bot. 1800: Part 1, 37.

Drosera longifolia Michx. Fl. Bor. Am. 1: 186. 1803. Not L.

Drosera americana Willd, Enum. 340. 1809.

Drosera intermedia var. Americana DC. Prodr. 1: 318. 1824.

Rootstock elongated (2'-4') long when growing in water). Scape erect, glabrous, 2'-8' high. Blades of the leaves ascending, spatulate, obtuse at the apex, 3''-7'' long, $1\frac{1}{2}''-2''$ wide, their upper surfaces clothed with glandular hairs, gradually narrowed into a glabrous petiole $\frac{1}{2}'-1\frac{1}{2}'$ long; raceme 1-sided; flowers several; pedicels about $1\frac{1}{2}''$ long; petals white, slightly exceeding the sepals; seeds oblong, the testa close, roughened.

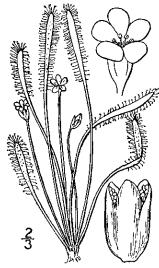
In bogs, Newfoundland to Saskatchewan, south to Florida and Louisiana. Also in Cuba, and in northern Europe. June-Aug.

Drosera lineàris Goldie. Slender-leaved Sundew.

Drosera linearis Goldie, Edinb. Phil. Journ. 6: 325. 1822.

Scape low but sometimes exceeding the leaves, glabrous. Petioles erect, glabrous, 2'-4' long; blade linear, \frac{1}{2}'-3' long, about I" wide, densely clothed with glandular hairs, obtuse at the apex; flowers few, or solitary, white; petals somewhat exceeding the sepals; seeds oblong, black, the testa close, smooth and somewhat shining.

In bogs, Quebec to Ontario, Alberta, Maine, Wisconsin and Minnesota. Blooms a little later than D. rotundifolia when the two grow together.



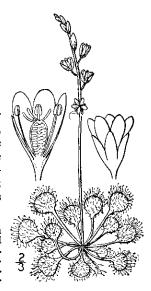
Drosera rotundifòlia L. Round-leaved Sundew or Dew-plant. Evebright.

Drosera rotundifolia L. Sp. Pl. 281. 1753.

Drosera rotundifolia comosa Fernald, Rhodora 7: 9. 1905.

Scape slender, erect, glabrous, 4'-10' high. Leaves orbicular or broader, spreading on the ground, the blade 3"-6" long, abruptly narrowed into a flat pubescent petiole ½'-2' long, the upper surface covered with slender glandular hairs; raceme I-sided, simple or sometimes once forked, 1-25-flowered; pedicels I"-2" long; flowers about 2" broad, opening in sunshine; petals white to red, oblong, somewhat exceeding the sepals; seeds fusiform, pointed at both ends, the testa loose.

In bogs or wet sand, Newfoundland and Labrador to Alaska, south to Florida and Alabama, in the Rocky Mountains to Montana and Idaho, and in the Sierra Nevada to California. Ascends to 2500 ft. in the Catskills. Also in Europe and Asia. Rootstock usually short. Parts of the flower are sometimes transformed into small green leaves. Rosa-solis. Youth-wort. Moor-grass. Red-rot. Lustwort. July-Aug.



Empetrum nìgrum L. Black Crowberry. Heathberry.

Empetrum nigrum L. Sp. Pl. 1022. 1753.

Glabrous, or the young shoots and leaves pubescent, usually much branched, the branches diffusely spreading, 2'-10' long. Leaves crowded, dark green, linear-oblong, thick, obtuse, 2"-3½" long, about ½" wide, the strongly revolute margins roughish; flowers very small, purplish; stamens exserted; drupe black, purple or red, 2"-3" in diameter.

In rocky places, Greenland to Alaska, south to the coast of Maine, the higher mountains of New England and northern New York, Michigan and California. Also in Europe and Asia. Crake-berry. Black-berried heath. Wire-ling. Crow-pea. Monox-heather. Heath. Hog-cranberry. Crowberry. Curlew-berry. Grows in dense beds; the fruit much eaten by arctic birds. Summer.



Epigaea rèpens L. Trailing Arbutus.

Mayflower. Ground Laurel.

Epigaea repens L. Sp. Pl. 395. 1753.

Spreading on the ground, twigs hirsute, branches 6'-15' long. Leaves oval or nearly orbicular, thick, acute or obtuse and mucronulate at the apex, cordate or rounded at the base, mostly glabrous above, more or less hirsute beneath, green both sides, 1'-3' long, $\frac{1}{2}'-\frac{1}{2}'$ wide; petioles hirsute, $\frac{1}{2}'-\frac{1}{2}'$ long; flowers few or several in the clusters, $\frac{5''-8''}{2}$ long, and nearly as broad when expanded; corolla-tube somewhat longer than the sepals; capsule splitting along the partitions into 5-valves, which spread backward into a 5-parted rosette, exposing the white succulent fleshy interior.

In sandy or rocky woods, especially under ever-green trees, Newfoundland to Saskatchewan, south to Florida, Kentucky and Wisconsin. Often forms large patches. Winter or mountain pink. Gravel-plant. Crocus. Shadflower. March-May.



Epilobium angustifolium L.



Fire-weed. Great or Spiked Willow-herb.

Epilobium angustifolium L. Sp. Pl. 347. 1753. C. angustifolium Scop. Fl. Carn. Ed. 2, 1: 271. 1772. Epilobium spicatum Lam. Fl. Fr. 3: 482. 1778.

Erect, rather stout, simple or branched, glabrous or often finely pubescent above, 2°-8° high. Leaves alternate, very short-petioled, lanceolate, entire or denticulate, 2'-6' long, 4"-12" wide, pale beneath, acute at the apex, narrowed at the base, thin, the lateral veins confluent in marginal loops; flowers 8"-15" broad, purple, or sometimes white, in elongated terminal spike-like racemes; bracts mostly shorter than the pedicels; petals entire; style pubescent at the base; stigma 4-lobed; capsules 2'-3' long, about 1½" thick, finely canescent, at least when young; seeds about ½" long, smooth, or nearly so, the coma long, whitish.

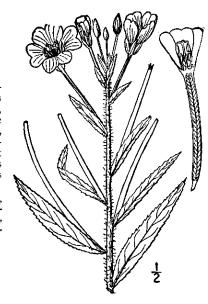
In dry soil, Greenland to Alaska, North Carolina, Indiana, Kansas; the Rocky Mountains to Arizona; Pacific Coast to California. Europe and Asia. Often abundant after forest fires. French-, bay- or Persian-willow. Rose-bay. Fire-top. Burnt weed. Purple rocket. French or bay willow-herb. Indian

Epilobium hirsùtum L. Great Hairy Willow-herb.

Epilobium hirsutum L. Sp. Pl. 347. 1753.

Stout, branched, 2°-4° high, softly hirsute-pubescent, spreading by subterranean shoots. Leaves lanceolate or oblong-lanceolate, usually opposite, sessile and often clasping at the base, acute at the apex, sharply serrulate, 1'-3' long, 4"-6" wide, thin, pubescent on both sides; flowers axillary, erect, rosepurple, about 1' broad; petals notched, pubescent at the base within; stigma deeply 4-lobed; capsules stalked, 2'-3' long, about 1" thick, pubescent; seeds about ½" long, smooth; coma whitish.

In waste places, Maine to central New York, Ontario, and in ballast about the sea-ports. Adventive or naturalized from Europe. English names, codlins-and-cream, fiddle-grass. Apple-, gooseberry- or cherry-pie [smell]. June-Sept.



Eranthis hyemàlis (L.) Salisb. Winter Aconite or Hellebore.

Helleborus hyemalis L. Sp. Pl. 557. 1753.

Eranthis hyemalis Salisb. Traus. Linn. Soc. 8: 304. 1803.

Cammarum hyemale Greene, Pittonia 3: 152. 1897.

Erect, simple, 5'-8' high from a tuberous-thickened rootstock; roots fibrous. Basal leaves longpetioled, 1½' broad, divided and cleft into numerous linear or oblong lobes; cauline leaf similar, involucrate, sessile, clasping; flower solitary, 1½' wide, sessile; sepals 5-9, membranous, obovate, obtuse, occasionally lobed; petals several, clawed, 2-lipped; stamens numerous; filaments filiform; anthers oblong, obtuse; carpels several, stipitate; follicles compressed, 5" long, tipped with a sharp beak.

Naturalized from Europe at Bartram's Garden, Philadelphia, and at Media, Pa. Wolf's-bane. Christmas-flower. February.

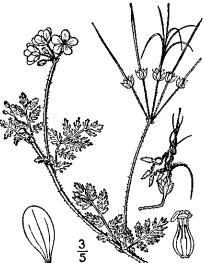
Erodium cicutàrium (L.) L'Her. Hemlock Stork's-bill or Heron's-bill. Alfilaria. Pink Needle.

Geranium cicutarium L. Sp. Pl. 680. 1753. E. cicutarium L'Her.; Ait. Hort Kew. 2: 414. 1789.

Annual, tufted, villous-pubescent, somewhat viscid, erect or ascending, branched, 6'-12' high. Basal and lower leaves petioled, 3'-7' long, ½'-1' wide, pinnate, the divisions finely pinnatifid; upper leaves sessile, otherwise similar; peduncles generally longer than the leaves, umbellately 2-12-flowered; flowers purple or pink, 4"-5" broad; sepals acute, villous, about equalling the entire petals; carpels hairy; beak ½'-1½' long, its divisions spirally coiled when ripe.

Waste places and fields, Nova Scotia to Ontario, New Jersey, Pennsylvania and Michigan and very abundant from Texas to Oregon. Adventive from Europe, in our area. A common weed in the Old World. Pin-clover. Pin-grass. Pinweed. Alfilerilla. Filerie. Wild musk. April—Sept.

Erodium moschàtum Willd., locally naturalized in the eastern states, has much broader less cut leaf-segments, unappendaged sepals and 2-toothed filaments.



Eryngium aquaticum var. aquaticum L.

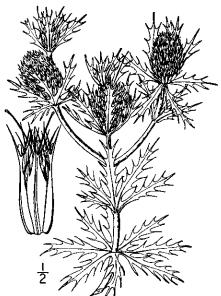
Virginian Eryngo.

E. virginianum Lam. Encycl. 4: 759. 1797.

Stem slender, erect, glabrous, branched above, striate, 1°-3° high. Upper stem-leaves linear, acuminate, sessile and clasping at the base, 2'-8' long, spiny-toothed or rarely laciniate, reticulate-veined; basal and lower leaves long-petioled, the blade linear-oblong, often obtuse, entire, or remotely denticulate; heads subglobose, 4"-7" long, equalling or shorter than the lanceolate spiny-toothed or entire reflexed bracts; bractlets usually 3-cuspidate with the middle cusp longest; calyx-lobes lanceolate, cuspidate; fruit scaly.

In marshes near the coast, New Jersey to Florida, west to Texas. July-Sept.



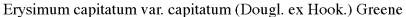


Eryngium Leavenworthii T. & G. Leavenworth's Ervngo.

E. Leavenworthii T. & G. Fl. N. A. 1: 604. 1840.

Stout, glabrous, 1°-3° high, branched above. Stem-leaves sessile, or somewhat clasping at the base, palmately pinnatifid into narrow spinytoothed segments; basal and lowest leaves oblanceolate, mostly obtuse, spinose-denticulate; heads peduncled, ovoid-oblong, 1'-2' long, nearly 1' thick, equalling or longer than the spinose bracts; bractlets 3-7-cuspidate, those of the upper part of the heads large and resembling the bracts; calyx-lobes pinnatifid, longer than the fruit.

In dry soil, Kansas and Arkansas to Texas. July-Oct. Briery thistle.



Eryngium yuccifolium Michx.

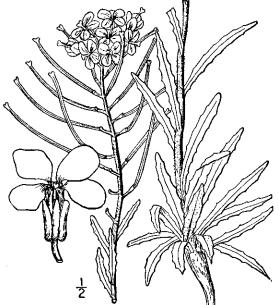
Rattlesnake-master. Button Snakeroot.

Eryngium aquaticum L. Sp. Pl. 232, 1753.

E. yuccaefolium Michx. Fl. Bor, Am. 1: 164. 1803.

Stout, 2°-6° high, glabrous; stem sriate, simple, or branched above. Leaves elongated-linear, acuminate at the apex, mostly clasping at the base, finely parellel-veined, the lower sometimes 3° long and 1½′ wide, the upper smaller, all with bristly margins, the bristles rather distant; heads stout-peduncled, globose-ovoid, 6″-10″ long, longer than the ovate or lanceolate cuspidate bracts; bractlets similar to the bracts but smaller; calyx-lobes ovate, acute; fruit scaly, about 1″ long.

In wet soil or upland, Connecticut to New Jersey, Illinois, South Dakota, Florida, Kansas and Texas. The name aquaticum is properly applied to this species, ascertained by a study of the Linnaean type specimen. June-Sept. Water-eryngo. Corn-snakeroot. Rattlesnake-flag or -weed.



Western Wall-flower. Yellow Phlox.

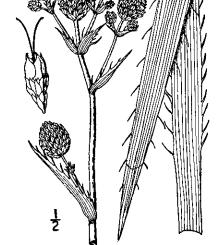
Erysimum lanceolatum Pursh, Fl. Am. Sept. 436. 1814. Not R. Br. 1812. Erysimum asperum DC. Syst. 2: 505. 1821. Erysimum arkansanum Nutt.; T. & G.

Erysimum arkansanum Nutt.; T. & G. Fl. N. A. 1: 95. 1838.

Rough-pubescent or hoary, 1°-3°

Rough-pubescent or hoary, 1°-3° high, simple or branching above. Lower leaves lanceolate or linear, tapering into a petiole, dentate or sometimes entire, mainly acute; upper leaves smaller, sessile or nearly so, entire or rarely toothed; flowers orange-yellow, large and showy, 6"-12" high and nearly as broad; pedicels stout, spreading, 2"-3" long in fruit; pods linear, rough, 1½-4' long, nearly 1" wide, 4-sided; styles short, thick.

In open places, Newfoundland and Quebec; Ohio and Illinois to Texas, Saskatchewan, Colorado and New Mexico. The eastern plant generally has broader leaves than the western. Prairie-rocket. Orange-mustard. May-July.

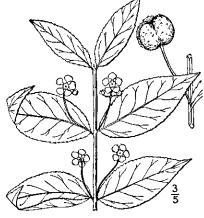


Euonymus americanus L. Strawberry Bush,

Euonymus americanus L. Sp Pl. 197. 1753.

A shrub, 2°-8° high, with 4-angled and ash-colored twigs, divaricately branching. Leaves ovate-lanceolate or oblong-lanceolate, thick, 1½'-3' long, ½'-1' wide, acuminate at the apex, acute or obtuse at the base, nearly sessile, crenulate, glabrous, or sparingly hairy on the veins beneath; peduncles 6"-12" long, very slender, 1-3-flowered; flowers greenish, 5"-6" broad; petals separated, the blade nearly orbicular, erose or undulate, the claw short; capsule slightly 3-5-lobed, not angular, depressed, tuberculate.

In low woods, southern New York to Florida, Illinois, Nebraska and Texas. June. Bursting-heart. Fish-wood. Burning bush.



Euonymus atropurpureus Jacq.

Euonymus atropurpureus Jacq. Hort. Vind. 2: 5, pl. 120. 1772.

A shrub or small tree, 6° –25° high. Twigs obtusely 4-angled; leaves ovate-oblong or elliptic, $1\frac{1}{2}'$ –5′ long, 1'–2½′ wide, acuminate at the apex, acute or obtuse at the base, puberulent, especially beneath, crenulate-serrulate, rather thin; petioles 4''–8″ long; peduncles very slender, 1'–2′ long, bearing a trichotomous 5–15-flowered cyme; pedicels 3''–6″ long; flowers purple, 5''–6″ broad; petals commonly 4, obovate, undulate; capsule smooth, deeply 3–4-lobed, 6''–8″ broad.

Ontario to Florida, Montana, Nebraska and, Oklahoma. Wood nearly white; weight per cubic foot 41 lbs. Indian-arrow. Strawberry-tree or -bush. Bitter-ash. Arrow-wood, Spindle-tree. June.



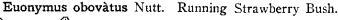
Euonymus europaèus L.

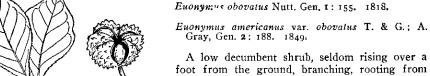
Spindle-tree.

Euonymus europaeus L. Sp. Pl. 197. 1753.

A glabrous shrub, 3°-9° high, resembling the preceding species. Leaves oblong to ovate-lanceolate, acuminate, crenulate; peduncles mostly less than 1' long, stouter; cymes 3-7-flowered; flowers greenish-yellow or yellowish-white, about 5" broad; petals 4 (rarely 5), oblong or obovate; capsule smooth, deeply 4-lobed.

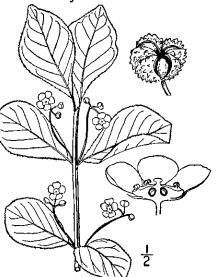
Escaped from cultivation to copses and roadsides, Virginia, New York and New Jersey. June. Arrowbeam. Prick-timber. Prickwood. Cat-tree. Pegwood, Pincushion-shrub. Skiver- or skewer-wood. Witchwood. Louseberry, Gatteridge. Butchers prick-tree. Gaiter- or Gatten-tree. European dogwood.





A low decumbent shrub, seldom rising over a foot from the ground, branching, rooting from the prostrate twigs. Branches 4-angled or slightly winged; leaves obovate or elliptic-obovate, rather thin, mostly acute or cuneate at the base, obtuse at the apex, finely crenulate-serrulate, I'-2' long, ½'-1½' wide, glabrous; petioles I"-2" long; peduncles I-4-flowered; flowers greenish, smaller than in the preceding species, about 3" broad; petals generally 5, nearly orbicular, crenulate or erose, close together or even slightly overlapping, with scarcely any claw; capsule commonly 3-celled, slightly lobed, depressed, tuberculate.

In low woods, southern Ontario to Pennsylvania, northern New Jersey (?), Illinois, Michigan, and Kentucky. Blooms earlier than E. americanus. April-May.





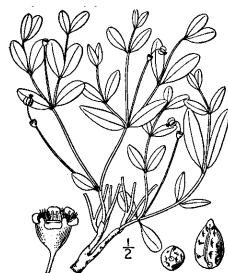
Euphorbia corollata L.

Blooming or Flowering Spurge.

Euphorbia corollata L. Sp. Pl. 459. 1753. Tithymalopsis corollata Kl. & Garcke, Monatsb. Akad, Ber. 1859: 249.

Perennial by a long stout rootstock, bright green, glabrous or somewhat pubescent. Stem erect, 10'-3° tall, often spotted usually simple; umbellately or paniculately branched above; leaves linear, oblong or oblong-spatulate, 10"-20" long, entire, short-petioled or sessile, the lower scattered, those subtending the umbel verticillate; rays of the umbel forked; bracts ovate to linear, green; involucres mostly terminal, less than 1" long, bearing 4 or 5 yellowish green oblong glands subtended by white petal-like cuneate or orbicular-cuneate appendages; capsule erect, subglobose, 1"-2" in diameter; seeds ovoid, smooth, sparingly pitted.

In dry soil, Ontario to Massachusetts, Minnesota, Kansas, Florida and Texas. April-Oct. Ascends to 4200 ft. in North Carolina. Apple-, bowman- or purging-root. Picac. Milk- or white purslane. Milk-pusley or -ipecac. Milkweed, Snakemilk. Wild hippo. Naturalized in its northeast-



Euphorbia ipecacuanhae L.

Wild Ipecac. Ipecac Spurge.

Euphorbia Ipecacuanhae L. Sp. Pl. 455. 1753. Tithymalopsis Ipecacuanhae Small, Fl. SE. U. S. 716.

Perennial by a deep perpendicular root, glabrous or pubescent. Stems several or many, slender, spreading, ascending or nearly erect, 4'-10' long, branched; leaves green or red, wonderfully variable in outline from linear to orbicular, 5"-3' long, mostly opposite, entire, the upper sometimes whorled, the lower often alternate, short-petioled; involucres axillary, mostly hemispheric, nearly I" long, slender-peduncled; bearing 5 transversely elliptic or oblong green sessile unappendaged glands; capsule 1½" in diameter, nodding; seeds light gray, oblong-ovoid or ovoid, 11 long, pitted, obscurely 4-sided.

In dry sandy soil, Connecticut to Florida, mostly near the coast. Also in southern Indiana. An emetic. Spurge-ipecac. American white ipecac. May-

Filipendula rùbra (Hil!) Robinson. Queen-of-the-Prairie.

Ulmaria rubra Hill, Hort, Kew. 214. pl. 7. 1769.

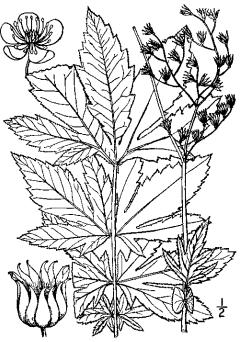
Spiraea lobata Gronov.; Jacq. Hort. Vind. 1: 38. pl. 88. 1770.

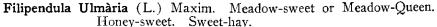
Spiraea rubra Britton, Bull, Torr. Club 18: 270.

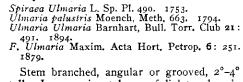
F. rubra Robinson, Rhodora 8: 204. 1906.

Glabrous, stem branched, grooved, 2°-8° tall. Leaves large, green on both sides, the lower sometimes 3° long, pinnately 3-7-foliolate, commonly with smaller leaf-segments interposed or borne on the petiole; lateral leaflets sessile, opposite, palmately 3-5-lobed or 3-5-parted, the lobes acute, unequally serrate or incised; terminal leaflet larger, 7-9parted; stipules serrate, persistent, 4"-8" long; flowers pink or purple, fragrant, about 4" broad; capsules glabrous.

In moist grounds and on prairies, western Pennsylvania to Illinois and Michigan, south to Georgia, Kentucky and Iowa. Escaped from gardens farther east. June-July.



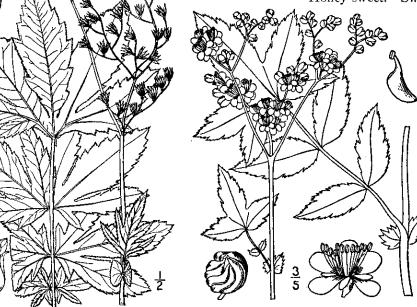




Stem branched, angular or grooved, 2°-4° tall. Leaves pinnately 3-9-foliolate, densely and finely white-downy beneath, green above, sometimes with several or numerous much smaller leaf-segments interposed between the leaflets or borne on the petiole; lateral leaflets sessile, opposite, ovate or ovate-lanceolate, acute or acuminate, serrate or sometimes slightly lobed, the terminal one larger and deeply 3-5-lobed, the lobes acute and serrate; stipules about 1 long; flowers white or greenish-white, fragrant.

Escaped from gardens, Quebec to Massachusetts. Native of Europe and Asia. June-Aug. Meadow-wort. Herb Christopher. My lady's-belt. Bride-wort.

Filipendula denudàta (Presl) Rydb., differs in having the leaves green on both sides, and is established near Dover, Maine. It is also native of Europe and Asia.



Foeniculum vulgare P. Mill.

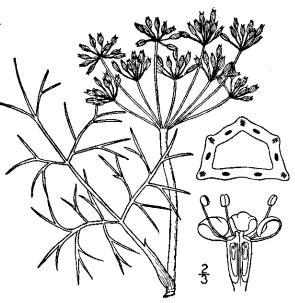
Fennel.

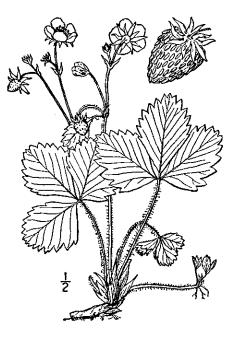
Anethum Foeniculum L. Sp. Pl. 263.
1753.
Foeniculum vulgare Hill. Brit. Herb.

413. 1756. Foeniculum Foeniculum Karst. Deutsch. Fl. 837. 1880-83.

Perennial, branched, 2°-4° high. Leaves very finely dissected into capillary segments; petioles broad, clasping; umbels large, 9-25-rayed, the rays rather stout, somewhat glaucous, 1'-3' long in fruit; pedicels 1"-4" long, slender; fruit about 3" long.

In waste places, Connecticut to Pennsylvania, Virginia, Missouri and Louisiana, escaped from gardens. Bermuda. Adventive or naturalized from Europe. Dill. Finkel. Spingel. July-Sept.





Fragaria vésca L. European Wood or Hedge Strawberry.

Fragaria vesca L. Sp. Pl. 494. 1753.

Stout, tufted, dark-green, generally less villous than the two preceding species. Leaflets ovate or broadly oval, obtuse, dentate, broader but nearly or quite as thick, the terminal one cuneate, the others inequilateral at the base; scape commonly exceeding the leaves, so that the fruit is borne above them, sometimes 12' high, its hairs mostly spreading; calyx-lobes remaining spreading or sometimes reflexed; fruit red, or sometimes white, ovoid-conic, the achenes borne on its smooth and nearly even surface.

In woods, fields and along roadsides. Naturalized from Europe in the Eastern and Middle States; apparently native northward, the white-fruited race native from Connecticut and New York to Ohio and Kentucky. Sow-tit. Sheep-noses. April-June.

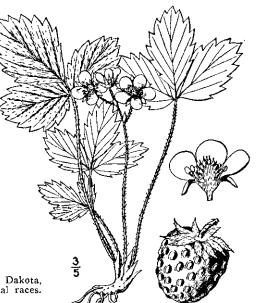
Fragaria virginiàna Duchesne. Virginia or Scarlet Strawberry.

F. virginiana Duchesne, Hist. Nat. Fras. 204.

F. australis Rydb. N. Am. Fl. 22: 361. 1908. Fragaria terrae-novae Rydb. Mem. Dep. Bot. Col. Univ. 2: 182. 1898.

Rather stout, tufted, dark green, more or less villous-pubescent with spreading or sometimes appressed hairs. Petioles 2'-6' long; leaflets thick, or even coriaceous, short-stalked or sessile, broadly oval or obovate, obtuse, dentate-serrate, the terminal one generally cuneate, the lateral inequilateral at the base; scape equalling or shorter than the leaves, the fruit being generally borne below them; hairs of the scape more or less spreading; pedicels appressed-pubescent; calyx-lobes, at least of the sterile flowers, erect at maturity, lanceolate; petals obovate; fruit red, ovoid, the achenes imbedded in pits.

In dry soil, Newfoundland to South Dakota, Florida and Oklahoma. Consists of several races. April-June.

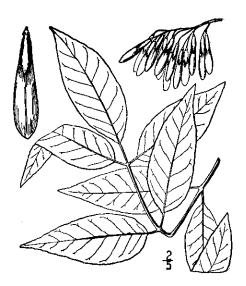


Fraxinus americana L. White Ash. Cane Ash.

Fraxinus americana L. Sp. Pl. 1057. 1753.

A large forest tree, reaching a maximum height of about 130° and a trunk diameter of 6°. Twigs, petioles and rachis of the leaves glabrous; leaflets 5-9 (commonly 7), ovate, ovate-lanceolate, oblong or rarely slightly obovate, stalked, entire or denticulate, dark green above, pale or light green and often pubescent beneath, 3'-5' long, 1'-2' wide, acuminate or acute at the apex, mostly rounded at the base; flowers dioecious (rarely monoecious), the calyx of the pistillate present and persistent; anthers linear-oblong; samara 1'-2' long, its body terete, not margined, winged only from near the summit, one-fourth to one-half the length of the linear-oblong or lanceolate wing.

In rich woods, Nova Scotia to Ontario, Minnesota, Florida, Kansas and Texas. Wood heavy, hard, strong, brown; weight per cubic foot 41 lbs. April-June.

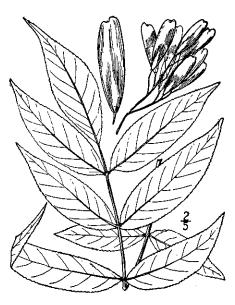


Fraxinus nìgra Marsh. Black or Brown Ash. Hoop Ash.

Fraxinus nigra Marsh. Arb. Am. 51. 1785. Fraxinus sambucifolia Lam. Encycl. 2: 549. 1786.

A swamp tree, reaching a maximum height of about 100° and trunk diameter of 3°, the twigs terete, the foliage glabrous, except the midrib of the lower surfaces of the leaflets. Leaflets 7-11, sessile, green on both sides, oblong-lanceolate, long-acuminate at the apex, narrowed or rounded at the base, sharply serrate or serrulate, 3'-6' long, 9"-18" wide; flowers dioecious; calyx none; anthers short-oblong; samara oblong or linear-oblong, parallel-nerved, 1'-1½' long, 3"-4" wide, the body flat, winged all around, extending to or beyond the middle.

In swamps and wet woods. Newfoundland to Manitoba, south to Virginia, Illinois and Arkansas. Wood heavy, soft, not strong, dark brown; weight per cubic foot 39 lbs. April-May. Swamp-, basketor water-ash.



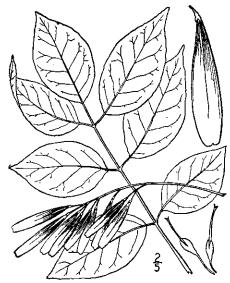
Fraxinus pennsylvánica Marsh. Green, Red. Blue or Black Ash.

Fraxinus pennsylvanica Marsh. Arb. Am. 51. 1785. Fraxinus pubescens Lam. Encycl. 2: 548. 1786. Fraxinus lanceolata Borck. Handb. Forst. Bot. 1: 826. 1800.

Fraxinus viridis Michx. f. Hist. Arb. Am. 3: 115. pl. 10. 1813.

A tree with maximum height of about 65° and trunk diameter of 3°, glabrous or nearly so throughout, or the twigs and leaves more or less pubescent, sometimes densely so. Leaflets 5-9, stalked, entire or denticulate, ovate or oblong-lanceolate, acuminate or acute at the apex, mostly narrowed at the base, green on both sides, 2'-6' long, I'-2' wide; flowers dioecious, the calyx of the pistillate persistent; anthers linear-oblong; samara I'-2' long, the usually spatulate wing decurrent on the sides of the body sometimes to below the middle.

Moist soil, New Brunswick to Minnesota, Florida and Texas. Wood hard, strong, brown; weight per cubic foot 44 lbs. Water-, swamp- or river-ash. April-May.



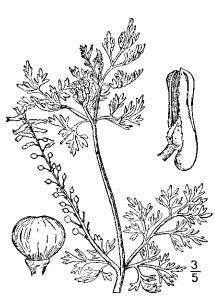
Fumaria officinàlis L. Fumitory. Hedge Fumitory.

Fumaria officinalis L. Sp. Pl. 700. 1753.

Glabrous, stems diffuse or ascending, freely branching, $6'-3^\circ$ long. Leaves petioled, finely dissected into entire or lobed linear oblong or cuneate segments; racemes axillary and terminal, 1'-3' long, narrow; pedicels 1''-2'' long, axillary to small bracts; flowers purplish, 2''-3'' long, crimson at the summit; sepals acute, toothed; spur rounded, $\frac{1}{2}''$ long; nut 1'' in diameter, depressed-globose.

In waste places and on ballast, occasionally about towns and villages, Newfoundland to Florida and the Gulf States, and locally in the interior. Bermuda. Fugitive or adventive from Europe. Summer. Waxdolls. Earth-smoke.

Fumaria parviflòra Lam., found on ballast about the seaports, may be distinguished by its still smaller paler flowers (2"), very narrow sharp and channeled leaf-segments, and its apiculate nut.

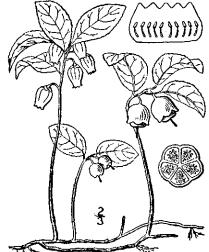


Gaultheria procúmbens L. Spring, Creeping or Spicy Wintergreen. Checker-

Gaultheria procumbens L. Sp. Pl. 395. 1753.

Nearly glabrous throughout, aromatic; stems slender, creeping or subterranean; branches 'erect, 2'-6' high. Leaves mostly clustered at the ends of the branches, oval, oblong or obovate, obtuse or acute, narrowed at the base, short-petioled, the margins slightly revolute and serrate with low bristle-tipped teeth, dark green and shining above, pale beneath, 1'-2' long; flowers usually solitary in the axils, on recurved peduncles 2"-4" long, 2-bracteo-late under the calyx; corolla ovoid-urceolate, white, 5-toothed, 2"-3" long; fruit depressed-globose, slightly 5-lobed, bright red, 4"-6" in diameter, mealy, very spicy in flavor.

In woods, especially under evergreen trees, Newfoundland to Manitoba, New Jersey, Georgia, West Virginia, Indiana and Michigan. June-Sept. Fruit ripe late in the autumn, remaining on the plant until spring. Chinks. One-berry. Drunkards. Chicken-berry. Red pollom. Box-, ground-, tea-, green- or partridge-berry. Deer-, hill-, ginger-, ivy-, grouse- or spice-berry. Ivory plum. Mountain- or Canada tea.



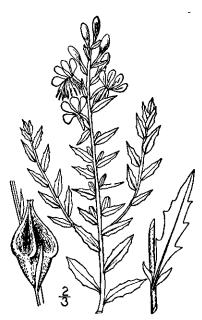
Gaura coccinea Pursh. Scarlet Gaura.

Gaura coccinea Pursh, Fl. Am. Sept. 733. 1814. G. marginata Lehm.; Hook. Fl. Bor. Am. 1: 208. 1833.

Erect or ascending, much branched, canescent, pubescent or glabrate, 6'-2° high. Leaves oblong, lanceolate, or linear-oblong, denticulate, repand or entire, acute or obtuse at the apex, narrowed at the base, 6"-18" long, 2"-4" wide; flowers sessile, red, turning scarlet, 4"-5" broad; fruit sessile, terete below, 4-sided and narrowed above, canescent, 3"-4" long.

Prairies and dry soil, Manitoba to Minnesota, Missouri, Nebraska and Texas, west to Montana, Utah, Arizona, and in Mexico. Adventive farther east. Wild honeysuckle (Texas). May-Aug.

Gaura glàbra Lehm, differs in having a glabrous shining stem, the foliage also glabrous or nearly so, the flowers often paler in color. It ranges from South Dakota to Nebraska, Montana and New Mexico, and is probably a race of G. coccinea.



Gaura parviflòra Dougl. Small-flowered Gaura.

Gaura parviflora Dougl.; Hook. Fl. Bor. Am. 1: 208. 1832.

Erect, branched, villous-pubescent with whitish hairs, 2°-5° high. Leaves ovate-lanceolate, acute or acuminate at the apex, repand-denticulate, narrowed at the base, sofuly pubescent, 1½'-4' long, 4''-18" wide; spikes elongated, usually densely flowered; flowers sessile, pink, 1½"-2" broad, the ovary and calyx-tube slender; fruit sessile, narrowed at the base, 4-nerved, obtusely 4-angled, glabrous or nearly so, 3"-4" long.

In dry soil, South Dakota to Iowa, Missouri, Louisiana, Texas, Mexico, Oregon, Utah and New Mexico, May-Aug.



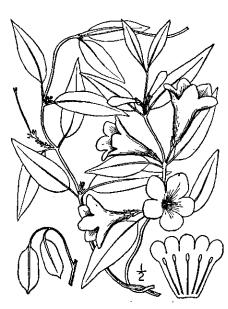


Gaylussacia baccàta (Wang.) K. Koch. Black or High-bush Huckleberry.

Andromeda baccata Wang, Beitr. 111, pl. 30, f. 69. 1787. Vaccinium resinosum Ait. Hort. Kew. 2: 12, 1789. G. resinosa T. & G.; Torr. Fl. N. Y. 1: 449. 1843. G. baccata K. Koch, Dendr. 2: 93. 1869-72.

A shrub, 1°-3° high, with ascending or erect stiff grayish branches, the young shoots commonly pubescent. Leaves oval or oblong, rarely obovate, obtuse or acutish, entire, very resinous when young, mucronulate, glabrous or very nearly so and green on both sides, firm, 1'-2' long; petioles about 1" long; flowers few, pink or red, in short one-sided racemes; bracts small, reddish, deciduous, shorter than or equalling the usually 2-bracteolate pedicels; corolla ovoid-conic, 5-angled, becoming campanulate-cylindric, 2"-2½" long; filaments ciliate; fruit black without bloom, or bluish and with a bloom, rarely white or pink, about 3" in diameter, sweet but seedy.

In woods and thickets, preferring sandy soil, Newfoundland to Georgia, Manitoba, Wisconsin and Ken-Black-snap. Crackers, May-June, Fruit ripe July-Aug.



Gelsemium sempérvirens (L.) Ait. f. Yellow Jessamine. Carolina Jasmine.

Bignonia sempervirens L. Sp. Pl. 623. 1753. G. nitidum Michx. Fl. Bor. Am. 1: 120. 1803. G. sempervirens Ait. f. Hort. Kew. 2: 64. 1811.

Stem slender, climbing or trailing, sometimes 20° long. Leaves lanceolate, oblong-lanceolate or ovate-lanceolate, entire, short-petioled, persistent, evergreen, 1½-3′ long, 5″-12″ wide; cymes 1-6-flowered; pedicels short; bractlets several, dry, oblong or lanceolate, 1″-2″ long; flowers dimorphous; sepals oblong, obtuse; corolla bright yellow, 1′-1½ long; stigmas in one form short and anthers exserted, in the other form longer and anthers included; capsule flat, channeled on both sides, 4″-7″ long, cuspidate; seeds very flat, broadly winged at the summit.

In woods and thickets, eastern Virginia to Florida, Texas, Mexico and Guatemala, mostly near the coast. March-Oct. Called also Carolina wild woodbine, and evening trumpet-flower.

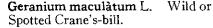


Genista tinctòria L. Dyeweed or Greenweed. Woad-waxen. Base Broom.

Genista tinctoria L. Sp. Pl. 710. 1753.

Branching from the base, not thorny, the sterile shoots decumbent, the flowering ones erect, stiff, $1^{\circ}-2^{\circ}$ high, branched above, slightly pubescent. Leaves 1-foliolate, sessile, lanceolate or elliptic-lanceolate, $\frac{1}{2}'-1\frac{1}{2}'$ long, glabrous or with scattered hairs, acute at the apex, narrowed at the base, entire, shining; stipules none; racemes numerous, terminal, 1'-2' long, few-flowered; bracts ovate-lanceolate, acute; flowers yellow, nearly sessile, about 6'' long; calyx bracteolate at the base, its 3 lower teeth narrower than the 2 upper; pod about 1' long, flat, glabrous.

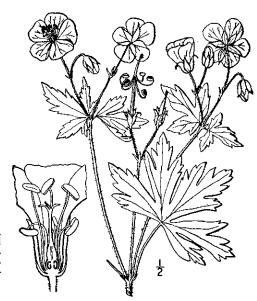
On dry hills, Maine and Massachusetts to eastern New York. Naturalized from Europe. Native also of northern Asia. Summer. Known also as wood-wax. green-wood, dyer's-broom. dyer's green-weed, dyer's-whin and alleluia.

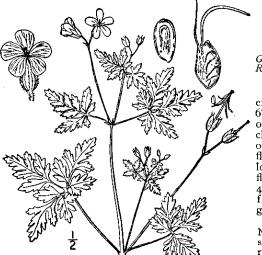


Geranium maculatum L. Sp. Pl. 681. 1753.

Perennial by a thick rootstock, pubescent with spreading or retrorse hairs, erect, simple, or branching above, 1°-2° high. Basal leaves long-petioled, nearly orbicular, broadly cordate or reniform, 3′-6′ wide, deeply 3-5-parted, the divisions obovate, cuneate, variously toothed and cleft; stem-leaves 2, opposite, shorter-petioled, otherwise similar to the basal ones; peduncles 1-5, elongated, generally bearing a pair of leaves at the base of the umbellate inflorescence; ultimate pedicels 1′-2′ long; flowers rose-purple, 1′-1½′ broad; sepals awn-pointed; petals woolly at the base; beak of the fruit 1′-1½′ long; carpels pubescent; seed reticulate.

In woods, Maine and Ontario to Manitoba, Georgia, Alabama and Nebraska. Recorded from Newfoundland. Alum-root or bloom. Crowfoot. American kino-root. Shame-face. Chocolate-flower. Rockweed. Sailor's-knot. April-July.





Geranium robertianum L.

Hanks. Herb Robert. Red robin.

Geranium Robertianum L. Sp. Pl. 681. 1753. Robertiella Robertiana Hanks; Hanks & Small, N. A. Fl. 25: 3. 1907.

Annual or biennial, glandular-villous, weak, extensively branching, erect or decumbent, 6'-18' high, heavy-scented. Leaves thin, ovate-orbicular in outline, the divisions cleft, finely lobed or toothed, the teeth oblong, mucronate; peduncles slender, 2-flowered, 1'-3' long; pedicels divaricate, 2' long; sepals acuminate and awn-pointed; flowers red-purple, about 6" broad; petals 4"-5" long, narrow-clawed; beak of the fruit about 1' long, awn-pointed, nearly glabrous; carpels nearly glabrous, wrinkled.

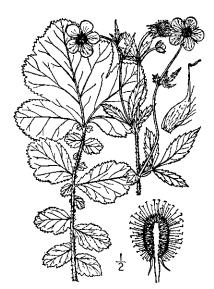
In rocky woods, rarely in sandy places, Nova Scotia to Manitoba, New Jersey, Pennsylvania and Missouri. Occurs also in Europe, Asia and northern Africa. Odor disagreeable. Fox, mountain or wild geranium. Redrobin. Red-shanks. Dragons'-blood. Jennywren. Wren's-flower. Red bird's-eye. May-Oct.

Geum macrophýllum Willd, Large-leaved Avens.

Geum macrophyllum Willd, Enum. 557. 1809.

Stout, erect, bristly-pubescent, simple or branched above, 1°-3° high. Stipules broad, foliaceous; basal leaves petioled, lyratc-pinnate, the terminal segment much the largest, reniform, orbicular or cordate, crenulate-dentate, 3-7-lobed; lateral leaflets 3-6, oval or obovate, with smaller ones interspersed or borne on the petiole; stem-leaves short-petioled or sessile, the leaflets or lobes 2-4, cuneate; flowers several, terminal, short-peduncled, yellow, 5"-10" broad; petals obovate, exceeding the acute reflexed calyx-lobes; receptacle nearly glabrous; style slender, jointed, pubescent, at least below, 3"-5" long.

In low grounds, Newfoundland to Alaska and British Columbia, south to New York, Missouri, Colorado and California. Also in northern Europe. May-July.



Geum rivàle L. Purple or Water Avens.

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Geum rivale L. Sp. Pl. 501. 1753.

Erect, simple or nearly so, pubescent, 1°-3° high. Basal leaves lyrately and interruptedly pinnate, petioled, the lateral segments generally few and small, the terminal 1-3, much larger, all sharply and irregularly lobed and dentate; stem-leaves distant, short-petioled or sessile, simple, or 3-foliolate; flowers few, terminal, purple or purplish, nodding, 9"-12" broad; petals obovate, emarginate, abruptly narrowed into a claw; calyx-lobes spreading, purple; head of fruit stalked in the calyx; achenes pubescent; style jointed, plumose below, 3"-4" long.

In swamps and low grounds, Newfoundland to British Columbia, New Jersey, Pennsylvania, Michigan and Colorado. Also in northern Europe and Asia. Indianchocolate. Evan's- or chocolate-root. Drooping avens. Maiden-hair. Throatwort. Throat-root. Cure-all. May-July.

Geum púlchrum Fernald, similar, but with smaller clear yellow flowers, found in Quebec, Vermont and Alberta, is presumably a hybrid of this species with G. macrophyllum Willd.

Gillenia stipulata (Muhl. ex Willd.) Nutt.

American Ipecac.

Spiraea stipulata Muhl.; Willd, Enum. 542. 1809. Gillenia stipulacea Nutt. Gen. 1: 307. 1818. P. stipulatus Britton, Mem. Torr. Club 5: 115. 1894.

Resembling the preceding species, but generally more pubescent. Stipules foliaceous, broad, ovate, acuminate or acute, 4"-12" long, sharply incised-serrate; leaflets commonly narrower than those of the preceding, incised-serrate, or those of the lower leaves deeply pinnatifid; flowers commonly fewer and slightly smaller; pods less pubescent or sometimes quite glabrous.

In woods, western New York to Indiana and Kansas, south to Georgia, Louisiana and Oklahoma. Indian physic. June-July.



Gillenia trifoliata (L.) Moench

Indian Physic. Bowman's-root. False Ipecac.

Spiraea trifoliata L. Sp. Pl. 490. 1753. Gillenia trifoliata Moench, Meth. Suppl. 286. 1802. P. trifoliatus Britton, Mem. Torr. Club 5: 115. 1894.

Herbaceous from a perennial root, erect, branching, 2°-4° high, glabrous or somewhat pubescent. Stipules subulate, 2"-4" long, entire or serrate; leaflets short-stalked, oval, ovate, lanceolate or slightly obovate, acuminate at the apex, narrowed at the base, 2'-3' long, irregularly serrate; upper leaves often 3-lobed, or sometimes merely serrate; panicles few-flowered; pedicels slender; petals white or pinkish, 5"-6" long; calyx reddish; pods pubescent, subulate-tipped, little exceeding the calyx.

Woodlands, Ontario and New York to Michigan, Georgia and Missouri. Ascends to 4500 ft. in North Carolina. Stipules rarely larger, lanceolate. Meadowsweet. Indian hippo. Western dropwort. May-July.

Glaucium flavum Crantz

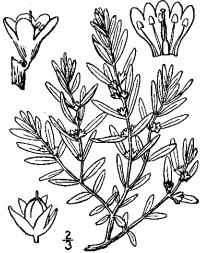
Yellow Horned or Sea Poppy.

Chelidonium Glaucium L. Sp. Pl. 506. 1753. Glaucium flavum Crantz, Stirp. Aust. 2: 131. 1763. Glaucium luteum Scop. Fl. Carn. Ed. 2, 1: 369. 1772. Glaucium Glaucium Karst. Deutsch. Fl. 649. 1880-83.

Stout, 2°-3° high, rigid, branching. Leaves thick, ovate or oblong, 3'-8' long, 1'-2' wide, scurfy, the basal and lowest cauline petioled, the upper sessile, clasping, pinnatifid, the divisions toothed, or the upper merely lobed; flowers axillary and terminal, 1'-2' broad; sepals scurfy; capsule narrowly-linear, 6'-12' long, tipped with the persistent stigma.

In waste places, Rhode Island, southward near the coast to Virginia, and in central New York. Widely diffused as a weed in maritime regions of the Old World. Adventive from Europe. Summer. Bruisewort. Squatmore.





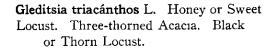
Glaux marítima L. Sea Milkwort. Black Saltwort.

Glaux maritima L. Sp. Pl. 207. 1753.

G. maritima obtusifolia Fernald, Rhodora 4: 215. 1902.

Perennial by slender rootstocks, glabrous, pale or glaucous, simple or branched, erect or diffuse, 2'-12' high. Leaves oval, oblong or linear-oblong, rarely somewhat spatulate, sessile, 2"-7½" long, 1"-4" wide, the lower usually smaller than the upper; flowers about 1½" broad, solitary and very nearly sessile in the axils, usually numerous; calyx-lobes oval, pink, purplish or white; stamens either shorter than the style or exceeding it; capsule nearly enclosed by the calyx, but free from and about equalling it.

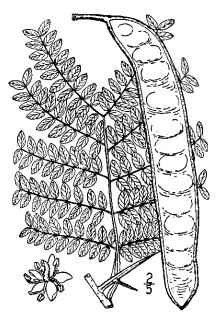
In salt marshes and on sea-beaches, New Jersey to Newfoundland; in saline or subsaline soil from Minnesota to Manitoba, Alberta, Nebraska and Nevada; on the Pacific Coast from California to Alaska. Also in Europe and Asia. Called also sea-trifoly. June-Aug.

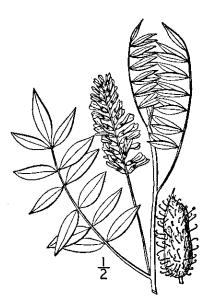


Gleditsia triacanthos L. Sp. Pl. 1056. 1753.

A large tree, with rough bark, maximum height about 140° and trunk diameter 5½°, usually armed with numerous stout branching or simple thorns. Leaves petioled, 1-2-pinnate; leaflets short-stalked, oblong-lanceolate or oval, obtuse at each end, inequilateral at the base, glabrous above, often pubescent on the veins beneath, crenulate, 8"-15" long; racemes solitary or clustered, slender, drooping, dense, 3'-5' long; flowers greenish, about 2" broad; pod linear-oblong, 1°-1½° long, 1'-1½' wide, stalked, glabrous and shining, twisted, many-seeded, pulpy within, sometimes eaten.

In woods, western New York and Ontario to Michigan, Georgia, Kansas and Texas. Naturalized and extensively planted further east. Wood durable, bright brownish-red; weight per cubic foot 42 lbs. Pulp of the pod-sweet. May-July. Honey. Honey-shucks. Sweetbean.





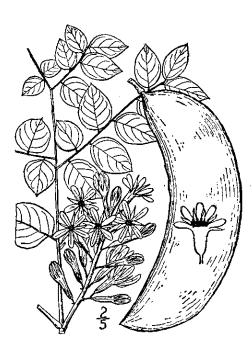
Glycyrrhiza lepidòta Pursh. Wild or American Licorice.

Liquivitia lepidota Nutt. in Fraser's Cat. Hyponym. 1813.

Glycyrrhiza lepidota Pursh, Fl. Am. Sept. 480. 1814.

Erect, branching, 1°-3° high, the foliage with minute scales or glands. Stipules lanceolate or ovatelanceolate, acute, 2"-3" long, deciduous; leaves petioled; leaflets 11-19, lanceolate, or oblong, acute or obtuse and mucronate at the apex, rounded or narrowed at the base, entire, very short-stalked, 10"-18" long, 3"-6" wide; peduncles much shorter than the leaves; spikes dense, many-flowered, 1'-2' long, about 9" thick; flowers yellowish-white, 6" long; calyxteeth slender, longer than the tube; pod about 6" long, few-seeded, oblong, densely covered with hooked prickles.

Hudson Bay to Minnesota, Saskatchewan, Washington, Iowa, Missouri, Chihuahua and Arizona. Locally in waste grounds farther east. May-Aug. Licorice-root.



Gymnocladus dioica (L.) Koch. Kentucky Coffee-tree.

Guilandina dioica L. Sp. Pl. 381. 1753. Gymnocladus canadensis Lam. Encycl. 1: 733. 1783. Gymnocladus dioicus Koch, Dendrol. 1: 5. 1869.

A large forest tree, with rough bark, maximum height about 100°, and trunk diameter of 3°. Leaves large, bipinnate, petioled; pinnae 5-9, odd or evenly pinnae; leaflets 7-15 (or the lowest pair of pinnae of but a single leaflet), ovate, acute or acuminate at the apex, rounded at the base, glabrous, or pubescent on the veins beneath, ciliate on the margins, 1'-3' long; racemes many-flowered, elongated; flowers nearly white, slender-pedicelled, 8"-9" long; pod 5'-10' long, about 14'-14' wide, the valves thick and cortaceous.

Rich woods, southern Ontario and New York to Pennsylvania, Tennessee, South Dakota, Nebraska and Oklahoma. Wood soft, strong, light reddish-brown; weight per cubic foot 43 lbs. The fruit called Coffee-nut. May-June. Kentucky mahogany. Chicot. American coffee-bean. Nickarteen

Hamamelis virginiàna L. Witch-Hazel.

Hamamelis virginiana L. Sp. Pl. 124. 1753.

A shrub, or rarely a small tree with maximum height of about 25°, the twigs slightly scurfy, or glabrous. Leaves short-petioled, obovate or broadly oval, obtuse or pointed at the apex, somewhat cordate and inequilaterall at the base, stellate-pubescent, at least when young, 2'-5' long, thick, repand-dentate; flowers in axillary clusters, nearly sessile, bright yellow, appearing late in the season, when the leaves are falling and while the previous fruit remains; petals narrow, about ½" wide, 6"-9" long; calyx-lobes spreading or recurved, oval, ciliate, pubescent on the outer surface; capsule maturing the next season, beaked with the 2 persistent styles, densely pubescent, 3"-4" high, at length bursting elastically; seeds bony.

In low woods, Nova Scotia to Ontario, Minnesota, Florida, Texas. Wood hard; weight per cubic foot 43 lbs. Spotted-alder. Tobacco-wood, Snapping-hazel. Pistachio. Winter-bloom. Aug.—

Dec. Jan.-March in the southwest.



Helianthemum corymbosum Michx.

Pine-barren Frostweed.

Helianthemum corymbosum Michx. Fl. Bor. Am. 1: 307. 1803.

Erect, branching from the base, 6'-12' high, finely and densely canescent. Leaves oblong, or the lowest obovate, 10"-16" long, obtuse or acutish, 3"-5" wide, entire, slightly revolute in drying, pale beneath, dark green above, short-petioled; flowers in nearly naked, fastigiate cymes at the summits of the stem and branches; the petaliferous 6"-10" broad, on slender pedicels 6"-8" long; apetalous flowers clustered, nearly sessile; calyx of both kinds woolly-pubescent; outer sepals about equalling the inner; capsules of the larger flowers 2"-3" broad, many-seeded; those of the apetalous ones smaller and few-seeded.

In sandy soil, New Jersey (?), North Carolina to Florida and Louisiana.

Helianthemum canadense (L.) Michx.

Long-branched Frostweed. Scrofula-plant. Rock-rose. Frost-wort.

Cistus canadensis L. Sp. Pl. 526. 1753. Helianthemum canadense Michx. Fl. Bor. Am. 1: 308. 1803. Halimium canadense Grasser, Pflanzenreich 14: 51. 1903.

Puberulent-canescent, erect, ascending, or sometimes diffuse, 3'-2° high, stem at first simple, later with slender elongated branches. Leaves oblong, linear-oblong or oblanceolate, nearly sessile, 6"-15" long, 2"-4" wide, rough and dark green above, paler and canescent beneath, the margins commonly revolute in drying; petaliferous flowers solitary, or rarely 2, bright yellow, 9"-20" broad, their sepals pilose, the outer shorter than the inner, their capsules ovoid or obovoid, rounded above, 3"-4" long, much overtopped by the later elongating axillary branches: apetalous flowers appearing later, axillary, nearly sessile, their capsules about 2" in diameter; seeds papillose.

In dry rocky or sandy soil, Maine to Ontario, Indiana and Wisconsin, south to North Carolina and Mississippi. Petaliferous flowers May-July. In late autumn crystals of ice sometimes shoot from the base of the stem in



sometimes shoot from the base of the stem in this and the preceding species, whence the popular name frost-weed. Canadian rock-rose.

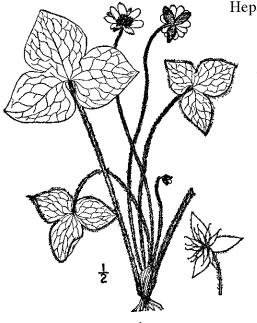


Helleborus víridis L. Green Hellebore.

Helleborus viridis L. Sp. Pl. 558. 1753.

Stout, erect, 1°-2° high, glabrous. Basal leaves 8'-12' broad, on petioles 6'-10' long, palmately divided into 7-11 oblong acute sharply serrate segments 3'-4' long; stem hardly exceeding the basal leaves, and bearing several sessile similar leaves near the top subtending the large drooping yellowish-green flowers; sepals broadly oblong, obtuse, spreading, about 1' long; petals tubular, 2-lipped, 2' long; stamens widened; anthers oblong, obtuse; pods 8" long, tipped with a slender beak one-third their length or longer.

In waste places, locally adventive from Europe in New York, New Jersey, Pennsylvania and West Virginia. Christmas-rose [properly *H. niger*]. Chris-root. May.



Hepatica nobilis var. acuta (Pursh) Steyermark Sharp- lobed or Heart Liver-leaf or Liverwort.

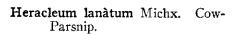
Hepatica triloba var. acuta Pursh, Fl. Am. Sept. 391. 1814.

Hepatica acutiloba DC. Prodr. 1: 22. 1824.

Hepatica acuta Britton, Ann. N. Y. Acad. Sci. 6: 234. 1891.

Scapes 4'-9' high, villous. Plant closely resembling the preceding, differing in that the leaf-lobes and those of the involucre are acute or acutish.

In woods, Maine, Quebec and throughout Ontario, south in the Alleghanies to Georgia, but rare or absent near the Atlantic Coast, west to Missouri and Minnesota. Puzzling forms occur which are referable with about equal certainty to the preceding species of which it may be regarded as a geographical race. The leaf-form of the German plant is quite intermediate between our Hepatica and acutiloba. A dioecious tendency of this species has been observed. March-April. Springbeauty. May-flower.



H. lanatum Michx. Fl. Bor. Am. 1: 166. 1803.

Very stout, tomentose-pubescent, 4°-8° high, the stem ridged, often 2' thick at the base. Leaves petioled, ternately divided, very pubescent beneath, the segments broadly ovate, or orbicular, cordate, stalked, lobed and sharply serrate, rather thin, 3'-6' broad; petioles much inflated; umbels 6'-12' broad, 8-30-rayed, the rays stout, 2'-4' long; pedicels 3"-9" long in fruit; fruit broadly oval, or obovate, 4"-6" long, 3"-4½" broad, finely pubescent, emarginate at the summit.

In moist ground, Newfoundland to Alaska, south to North Carolina, Missouri, Kansas, Utah and California. Master-wort. June-July.

Heracleum Sphondýlium L., of Europe, which is loosely pubescent, with pinnate leaves, has been found in ballast and waste grounds about the seaports.

Hepatica nobilis var. obtusa (Pursh) Steyermark

Round-lobed or Kidney Liver-leaf.

Anemone Hepatica L. Sp. Pl. 538. 1753.

Hepatica triloba Chaix in Vill. Hist. Pl. Dauph. 1: 336. 1786.

Hepatica Hepatica Karst. Deutsch. Fl. 559.4

Scapes 4'-6' high, villous; roots fibrous. Leaves long-petioled, reniform, 2'-2½' broad when mature, spreading on the ground, 3-lobed, and the lobes sometimes toothed or again lobed, obtuse; involucre of 3 sessile obtuse oblong leaves immediately under the flowers; flowers blue, purple or white, 6"-10" broad; sepals oval or oblong, obtuse, longer than the stamens; achenes several, 2" long, oblong, acute, hairy.

In woods, often in large tufts, Nova Scotia to northern Florida, west to Manitoba, Iowa and Missouri. Alaska. Ascends to 2600 ft. in Virginia. Also in Europe and Asia. Dec.—May. Heart- or three-leaf liverwort. Livermoss. Mouse-ears. Spring-beauty. Crystalwort. Golden trefoil. Ivy-flower. Herb Trinity. Squirrel-cup.



Heuchera americàna L. Alum-root.

Heuchera americana L. Sp. Pl. 226, 1753.

Stem rather stout, 2°-3° high, leafless, more or less glandular-hirsute. Basal leaves long-petioled, 3'-4' wide, with 7-9 rounded crenate-dentate lobes, the older ones glabrous, or with scattered hairs on the upper surface; flowering calyx broadly campanulate, nearly regular, 1½"-3" long; petals very small, greenish, usually not exceeding the calyx-lobes; stamens much exserted; anthers orange.

In dry or rocky woods, Ontario to Connecticut, west to Minnesota, south to Alabama and Louisiana. Ascends to 3000 ft. in Virginia. American sanicle. Common alum-root, May-Aug.

Heuchera lancipétala Rydb., from Kentucky, has a leafless flower-stem as in H. americana; but the petals are much longer than the calyx-lobes.

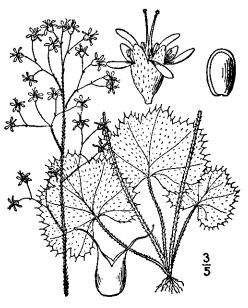


Heuchera parviflòra Bartl. Rugel's Heuchera.

Heuchera parviflora Bartl. Ind. Sem. Hort. Götting. 1838.—Linnaea 13: Litt. 96. 1839. H. Rugelii Shuttlw.; Kunze, Linnaea 20: 43. 1847.

Stems slender, 6'-24' long, weak, glandular-hirsute or villous, leafless or bearing a few leaves below. Basal leaves with long slender glandular-villous petioles, broadly reniform, 2'-5' wide, cordate at the base, with 7-9 broad rounded or rarely pointed lobes, crenately toothed, the teeth mucronate; inflorescence very loosely paniculate; flowering calyx regular, campanulate, about I' long; petals linear-spatulate, 2-3 times as long as the calyx-lobes; stamens somewhat exserted.

Shaded cliffs, Missouri and Illinois to western Virginia and northern Georgia. July-Sept.



Heuchera richardsonii R. Br.

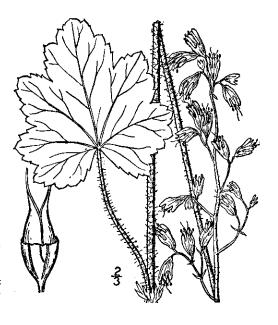
Rough Heuchera.

H. hispida Pursh, Fl. Am. Sept. 188. 1814.

Heuchera Richardsonii R. Br. Frankl. Journ. 766. pl. 29. 1823.

Stem 2°-4° tall, hirsutely-pubescent or rarely nearly glabrous, usually leafless. Leaves 2'-3' wide, on long and slender petioles, broadly ovate-orbicular, with 5-9 shallow rounded dentate lobes; panicle strict, narrow; flowering calyx campanulate, very oblique, 3"-5" long, its lobes unequal; petals spatulate, slightly exceeding the calyx-lobes; stamens exserted.

In woods, Virginia to western Ontario, west to Kansas, Manitoba and Saskatchewan, south in the Rocky Mountains to Idaho. May-June.



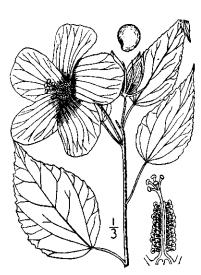


Heuchera villòsa Michx. Hairy Heuchera.

H. villosa Michx. Fl. Bor. Am. 1: 172, 1803.

Stem erect, leafless, or rarely bearing a few small leaves below, generally villous-pubescent with brownish hairs, as are also the long petioles and the veins on the lower surfaces of the leaves. Basal leaves 3'-5' wide, ovate to orbicular, sharply or obtusely and deeply 7-9-lobed, the lobes dentate or serrate, the terminal lobe usually longer than wide; flowering calyx I''-I½'' long, campanulate, regular; petals linear-spatulate, white or nearly so, twice as long as the calyx-lobes or more; stamens much exserted.

In rocky places, Virginia, West Virginia and Kentucky to Georgia and Tennessee. June– Sept. Called also American sanicle.



Hibiscus Moscheùtos L. Swamp Rose-Mallow, Mallow Rose.

Hibiscus Moscheutos L. Sp. Pl. 693. 1753. Hibiscus palustris L. Sp. Pl. 693. 1753. Hibiscus opulifolius Greene, Leaflets 2: 65.

Erect, 4°-7° high, forming numerous cane-like stems from a perennial root. Leaves ovate or ovate-lanceolate, 3'-7' long, cordate or obtuse at the base, acute or acuminate at the apex, the lower or sometimes all lobed at the middle, palmately veined, dentate or crenate, densely white stellate-pubescent beneath, green and glabrous or slightly stellate above; petioles 1'-5' long; flowers 4'-7' broad, pink, clustered on stout pedicels at the summits of the stems; peduncles often adnate to the petioles; bractlets linear, not ciliate, shorter than the calyx; calyx-lobes ovate; capsule ovoid, 1' long, glabrous or sparingly pubescent, abruptly short-pointed or blunt; seeds glabrous.

In brackish marshes, eastern Massachusetts to Florida and Louisiana, and on lake shores and in saline situations locally in the interior to western Ontario, Indiana and Missouri. Sea-hollyhock. Water- or swamp-mallow. Aug.—Sept.

Hydrangea arboréscens L. Wild Hydrangea.

H. arborescens L. Sp. Pl. 397. 1753. Hydrangea vulgaris Michx, Fl. Bor. Am. 1; 268. 1803.

Hydrangea arborescens kanawhana Millsp. Bull, W. Va. Agric, Exp. Sta. 2: 363. 1891.

A shrub, 4°-10° high, the young twigs pubescent or glabrate. Petioles slender, 1'-4' long; leaves ovate, thin, 3'-6' long, acute or often acuminate at the apex, rounded, cordate or rarely broadly cuneate at the base, sharply dentate, green both sides, or pale beneath, glabrous above, sometimes pubescent beneath; cymes 2'-5' broad; marginal sterile flowers usually few or none, but sometimes numerous, or forming the entire inflorescence, capsule wider than long.

On rocky stream or river banks, southern New York and New Jersey, very abundant in the valley of the Delaware, to Iowa, south to Florida, Louisiana and Missouri. Ascends to 4200 ft. in North Carolina. June-July, sometimes blooming again in Sept. Sevenbarks. Hills-of-snow.

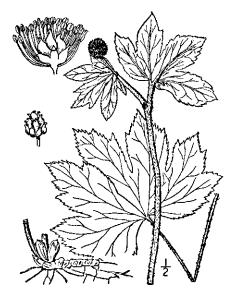


Hydrastis canadénsis L. Orange-root. Golden Seal.

Hydrastis canadensis L. Syst. Ed. 10, 1088. 1759.

Perennial from a thick yellow rootstock, about 1° high. Basal leaf long-petioled, 5'-8' broad, palmately 5-9-lobed, the lobes broad, acute, sharply and unequally serrate; cauline leaves 2, borne at the summit of the stem, the upper one subtending the greenish-white flower, which is 4"-5" broad when expanded; filaments widened, about 2" long; anthers oblong, obtuse; head of fruit ovoid, blunt, about 8" long, the fleshy carpels tipped with a short curved beak.

In woods, Connecticut to Minnesota, western Ontario, Georgia, Missouri and Kansas. Ascends to 2500 ft. in Virginia. April. Called also yellow puccoon, yellow-root, turmeric-root, yellow Indian paint. Indian-dye, -iceroot or -turmeric. Ohio cucuma. Eye-balm or -root. Yellow eye. Groundraspherry.

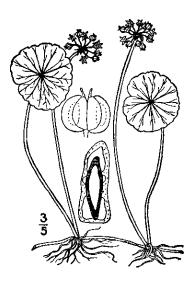


Hydrocotyle umbellàta L. Umbellate or Many-flowered Marsh-Pennywort.

Hydrocotyle umbellata L. Sp. Pl. 234. 1753.

Glabrous, stem creeping, several inches long, the subterranean branches tuberiferous. Petioles slender, erect, or ascending, I'-6' long; leaves peltate, orbicular, or broader than long, sometimes cordate at the base, ½'-2' wide, crenately 7-11-lobed, the lobes broad, not deep, mostly crenulate; peduncles elongated; umbels simple or rarely with a proliferous extension; pedicels slender, 2"-6" long; mature fruit notched at both ends, I"-1½" broad, not quite as long; intermediate ribs corky-thickened; dorsal rib obtuse.

In swamps and low grounds, eastern Massachusetts to Florida and the West Indies, Minnesota, Texas and Mexico. Also in South America and South Africa. June-Sept. Water-navelwort. Water-grass.

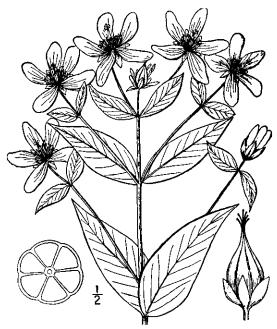


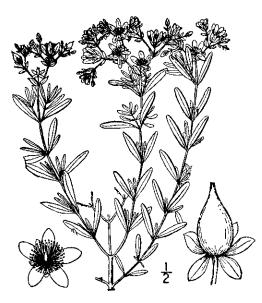
Hypericum Áscyron L. Great or Giant St. John's-wort.

Hypericum Ascyron L. Sp. Pl. 783. 1753. Hypericum pyramidatum Ait. Hort. Kew. 3: 103, 1789.

Perennial, herbaceous, erect, 2°-6° high, branching, the branches often nearly erect, angled. Leaves sessile, clasping, ovate-oblong or ovate-lanceolate, 2'-5' long, ½'-1½' wide, obtuse or acute; cymes terminal, few-flowered; flowers bright yellow, 1'-2' broad; pedicels stout. ½'-2' long; sepals ovate-lanceolate, 4"-6" long, acute; petals obvate or oblanceolate, tardily deciduous; styles usually 5, united below; stigmas capitate; stamens numerous, united in 5 sets; capsule ovoid, 9"-10" long; cells 3.

Banks of streams, western Quebec and Vermont to Manitoba, south to Connecticut, New Jersey, Pennsylvania, Illinois, Iowa, Missouri and Kansas. Also in northern Europe and Asia. July-Aug.





Hypericum densiflòrum Pursh. Bushy or Dense-flowered St. John's-wort.

Hypericum densiflorum Pursh, Fl. Am. Sept. 376. 1814.

Hypericum prolificum var. densistorum A. Gray, Man. Ed. 3, 84. 1867.

Erect, 4°-6° high, shrubby, freely branching, densely leafy; branches somewhat angled and branchlets 2-edged. Leaves crowded, 1'-2' long, 1½"-3" wide, acutish or obtuse, with smaller ones clustered in the axils; cymes densely many-flowered, mainly terminal; pedicels 1"-4" long; flowers 5"-8" broad; sepals narrow, not foliaceous, shorter than the petals; stamens numerous, distinct; styles 3, more or less united; capsule 3-celled, 2"-3" long.

Pine-barrens of New Jersey to Florida, west to Kentucky, Arkansas and Texas. July-Sept.

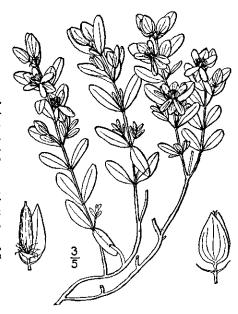
Hypericum hypericoides (L.) Crantz

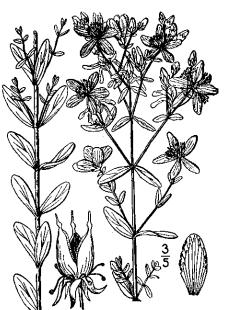
St. Andrew's Cross.

Ascyrum hypericoides L. Sp. Pl. 788. 1753. Ascyrum Crux-Andreae L. Sp. Pl. Ed. 2, 1107. 1763.

Low, much branched from the base, diffuse or ascending, 5'-10' high. Stems and branches flattened and 2-edged; leaves oblong or obovaće, sessile, narrowed and 2-glandular at the base, ½'-1½' long, 2''-4" wide, thin, obtuse; flowers terminal or also axillary; pedicels 1"-3" long; 2-bracted near the summit; flowers 6"-9" broad; outer sepals oval or ovate, sometimes cordate, 4"-6" long, 2"-4" wide, obtuse, the inner narrower and mainly shorter; petals oblong-linear, about equalling the outer sepals; styles 2; capsule ovoid, about 2" long.

In dry sandy soil, Nantucket, Mass., to Florida, Illinois, Nebraska and Texas. Ascends to 2800 ft. in Virginia. Cuba; Jamaica. July-Aug.





Hypericum perforàtum L. Common St. John's-wort.

Hypericum perforatum L. Sp. Fl. 785. 1753.

Perennial, herbaceous from a woody base, 1°-2° high, much branched. Stems erect, with numerous barren shoots at base; leaves sessile, oblong or linear, 5′-10″ long, 1″-4″ wide, obtuse, more or less black-dotted; cymes terminal, several-many-flowered; flowers bright yellow, 8″-12″ broad; sepals lanceolate, acute, shorter than the copiously black-dotted petals; stamens united at their bases into 3 sets; styles 3; capsule ovoid, 2″-3″ long, 3-celled, glandular.

In fields and waste places, common throughout our area except the extreme north, and in the Southern States. Naturalized from Europe, Often a troublesome weed. Native also of northern Asia, June-Sept. English names, amber, penny-john, rosin-rose, herb-john. Johnswort. Cammock. Touchand-heal, Crushed herbage odorous.

Hypericum punctàtum Lam. Spotted or Corymbed St. John'swort.

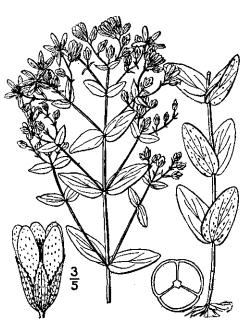
H. maculatum Walt. Fl. Car. 189. 1788. No Crantz.

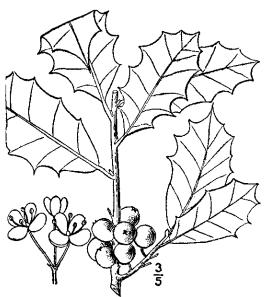
H. punctatum Lam. Encycl. 4: 164. 1797.
H. corymbosum Muhl.; Willd, Sp. Pl. 3: 1457.

H. subpetiolatum Bicknell; Small, Fl. SE. U. S. 790. 1903.

Herbaceous, perennial from a woody base, erect, 1½°-3° high. Leaves sessile, short-petioled, or partly clasping, oblong or ovate-lanceolate, obtuse, 1′-3′ long, 4′-8″ wide, copiously black-dotted; cymes terminal, many-flowered; pedicels about 1″ long; flowers much crowded, 4″-7″ broad; sepals ovate-oblong, acute, about half as long as the conspicuously black-dotted petals; stamens numerous, united in 3 or 5 sets; styles 3, variable in length; capsule ovoid, 2″-3″ long, cempletely 3-celled.

In moist soil, Quebec and Ontario to Minnesota, Florida and Kansas. June-Sept.





Ilex opàca Ait. American or White Holly.

Ilex opaca Ait. Hort. Kew. 1: 169. 1789.

A tree of slow growth, sometimes 50° high, and with a trunk diameter of 3½°. Young twigs sparingly pubescent; leaves elliptical or obovate, 2'-4' long, 1'-1½' wide, evergreen, glabrous on both sides, obtuse or acutish at the apex, spiny-tipped, spinosc-dentate, at least toward the apex, rarely nearly or quite entire; petioles 2"-4" long, sometimes puberulent; peduncles 2-bracted; staminate cymes 3-10-flowered, ½'-1' long; fertile flowers mostly scattered and solitary; calyx-lobes acute, ciliate; stigma sessile; drupe globose or globose-oblong, red, rarely yellow, 4"-5" in diameter; nutlets ribbed.

In moist woods, Massachusetts to Florida, Pennsylvania, Indiana, Missouri and Texas. Most abundant near the coast. Wood hard, nearly white; weight per cubic foot 36 lbs. Ascends to 3000 ft. in North Carolina. April-June.

Ilex verticillàta (L.) A. Gray. Virginia Winterberry. Black Alder. Fever-bush.

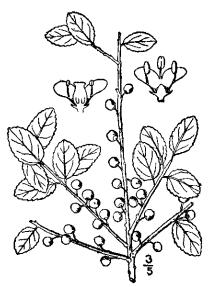
Prinos verticillatus L. Sp. Pl. 330. 1753. Prinos podifolius Willd. Enum. Hort. Berol. 394. 1809. Ilex verticillata A. Gray, Man. Ed. 2, 264. 1856.

A shrub, 6°-25° high. Twigs brown, glabrous or slightly pubescent; leaves oval, obovate or oblong-lanceolate, 2'-3' long, about I' wide, acute or acuminate at the apex, acute or obtusish at the base, rather thick and coriaceous, dark green and nearly glabrous above, pubescent, at least on the veins beneath, sharply serrate; staminate cymes clustered, 2-10-flowered, the fertile I-3-flowered; pedicels 2-bracted; calyx-lobes obtuse, ciliate; drupes bright red (rarely yellow or white), clustered so as to appear verticillate, about 3" in diameter; nutlets smooth.

In swamps, Connecticut to Florida, west to Wisconsin and Missouri, perhaps extending further north. The leaves turn black in autumn. Striped, white or false alder. June-July.

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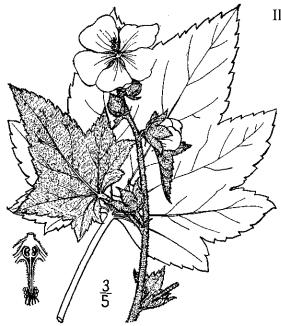


Ilex vomitòria Ait. Cassena. Yaupon. Emetic Holly.

Ilex Cassine Walt, Fl. Car. 241. 1788. Not L. 1753. Ilex vonitoria Ait, Hort, Kew. 1: 170. 1789.

A shrub, or small tree, with maximum height of about 25° and trunk diameter of 4'-6'. Petioles and young twigs puberulent; leaves ovate-oblong or elliptic, ½'-1½' long, 4"-9" wide, obtuse at both ends, crenate, glabrous, evergreen, pale beneath, dark green above; petioles 1"-2" long; staminate cymes several-flowered, short-peduncled; fertile cymes sessile, 1-3-flowered; pedicels longer than the petioles; calyx-lobes obtuse; drupe globose, red, 2"-3" in diameter; nutlets ribbed.

In low woods, Virginia to Florida, west to Arkansas and Texas. Naturalized in Bermuda. Wood hard, nearly white; weight per cubic foot 45 lbs. Appalachian, Carolina, or South-sea tea. Indian black-drink. Evergreen cassena. May.



Iliamna rivularis var. rivularis (Dougl. ex Hook.)

Maple-leaved Globe-Mallow.

Iliamna remota Greene, Leaflets 1: 206.

1906.

Sphaeralcea remota Fernald, Rhodora
10: 52. 1908.

Perennial, erect, branched, 2°-6° high, finely stellate-pubescent and scabrous. Leaves nearly orbicular in outline, palmately 5-7-lobed or cleft, cordate, the lobes ovate or lanceolate, dentate, acute, the middle one generally longest; flowers pink, 1'-1½' broad, short-pedicelled, clustered in the upper axils or in terminal spikelike racemes; bractlets of the involucels linear, shorter than the calyx; calyx densely pubescent, its lobes triangular, acuminate.

In gravelly soil, known only from an island in the Kankakee River, Illinois. Summer. Previously referred to the western Sphaeralcea acerifolia Nutt.

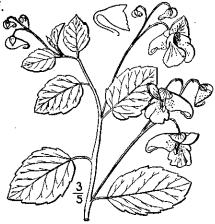
Impatiens capensis Meerb.

Spotted or Wild Touch-me-not. Silver-leaf.

Impatiens biflora Walt. Fl. Car. 219. 1788.

Impatiens fulva Nutt. Gen. 1: 146. 1818.

Annual, glabrous, $2^{\circ}-5^{\circ}$ high, branched, purplish. Leaves thin, ovate or elliptic, pale and glaucous beneath, $1\frac{1}{2}'-3\frac{1}{2}'$ long, generally obtuse, coarsely toothed, the teeth commonly mucronate; petioles slender, $\frac{1}{2}'-4'$ long; peduncles axillary, $\frac{1}{2}'-1\frac{1}{2}'$ long, 2-4-flowered; pedicels pendent, slender, bracted above the middle; bracts linear; flowers horizontal, orange-yellow, mottled with reddish-brown (rarely nearly white and not mottled), 9''-12'' long; saccate sepal conic, longer than broad, contracted into a slender incurved spur of one-half its length, which is 2-toothed at the apex.



In moist grounds, Newfoundland to Saskatchewan, Florida and Nebraska. Spurs are occasionally developed on the 2 small exterior sepals, and spurless flowers have been observed. This and the next called balsam, jewel-weed. Speckled jewels. Silver-, slipper- or snap-weed. Earjewel. Ladies'-slipper, pocket- or ear-drop. Wild or brook-celandine. Solentine. Snap-dragon. Shining-grass. Cowslip. Weather-cock. Kicking-colt or -horses. Wild balsam. July-Oct.

Impatiens pállida Nutt.

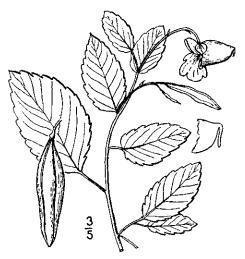
Pale Touch-me-not.

Impatiens pallida Nutt. Gen. 1: 146. 1818.

Impatiens aurea S. Wats, Bibl. Ind. 152, as a synonym. 1878. Not I. aurea Muhl. 1813.

Similar to the preceding species, but larger and stouter. Flowers pale yellow, sparingly dotted with reddish-brown, or sometimes dotless, 12"-15" long; saccate sepal dilated-conic, about as broad as long, abruptly contracted into a short scarcely incurved notched spur, less than one-third its length; bracts of the pedicels lanceolate to ovate, acute.

In similar situations, most abundant northward. Nova Scotia to Saskatchewan, Georgia and Kansas, July-Sept. Snapweed. Balsam. Wild balsam or celandine. Silverweed. Slippers. Quick-in-the-hand. Jewelweed.





Jeffersonia diphýlla (L.) Pers. Twin-leaf.

Podophyllum diphyllum L. Sp. Pl. 505. 1753. Jeffersonia binata B. S. Barton, Trans. Am. Phil. Soc. 3: 342. 1793.

Jeffersonia Bartonis Michx. Fl. Bor. Am. 1: 237. 1803.

Jeffersonia diphylla Pers. Syn. 1: 418. 1805.

Erect, 6'-8' high when in flower, attaining 16'-18' in fruit. Leaves glaucous beneath, long-petioled, cordate or reniform, 3'-6' long, 2'-4' wide, parted longitudinally into 2 obliquely ovate obtuse lobed or entire divisions; lobes rounded, the sinuses sometimes 9" deep; scape naked, 1-flowered; flowers white, about 1' broad; petals oblong, stigma peltate; capsule about 1' long, short-stipitate.

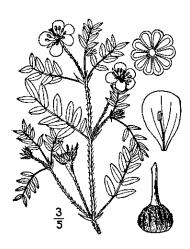
In woods, eastern Pennsylvania, New York and Ontario to Wisconsin, Iowa, Virginia and Tehnessee. Ascends to 2500 ft. in Virginia. May. Ground-squirrel pea. Helmet-pod. Rheumatism-root

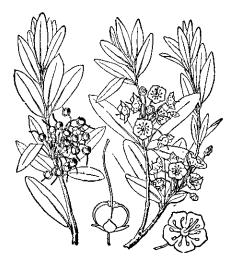
Kallstroemia parviflora J.B.S. Norton Greater Caltrop.

Kallstroemia intermedia Ryan. N. Am. Fl. 25: 113. 1910.

Annual, branches slender, hirsute and pilose, prostrate, 6'-18' long. Leaves short-petioled; stipules subulate, shorter than the petioles; leaflets 3-5 pairs, oval, or oblong, inequilateral, acute or obtuse at the apex, rounded or subcordate at the base, 4"-10" long; peduncles slender, 6"-2' long in fruit; flowers 1' broad, or less; sepals linear-lanceolate, very pubescent, persistent, shorter than the petals; fruit ovoid-conic, strigose-canescent, about 3" in diameter, shorter than the stout persistent style, the segments tubercled.

In dry soil, Missouri to Kansas, Texas, New Mexico and Chihuahua. Included in our first edition in K. maxima (L.) T. & G., which has glabrous fruit. April-Sept.



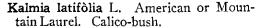


Kalmia angustifòlia L. Sheep-laurel. Lambkill. Wicky.

Kalmia angustifolia L. Sp. Pl. 391. 1753.

A shrub, 6'-3° high, with few nearly erect branches, and terete twigs. Leaves oblong or oblong-lanceolate, mostly opposite, or verticillate in 3's, obtuse or sometimes acute at the apex, narrowed at the base, petioled, glabrous, dark green above, light green beneath, I'-21' long, 3'-10" wide; young twigs and petioles often slightly glandular; flowers 3"-5" broad, purple or crimson, numerous in lateral compound or simple corymbs; pedicels filiform, slightly glandular-canescent, 6"-12" long, recurved in fruit; calyx-segments ovate, acute, glandular-canescent, persistent; capsule depressed-globose, 5-lobed, canescent, 11"-2" in diameter, the apex impressed: style long-persistent.

In moist soil, in swamps or on hillsides, Newfoundland to Hudson Bay, south to Georgia and Michigan. Spoon-wood-ivy. Kill-kid. Calf-kill. Sheep-poison. Dwarf laurel, June-July.

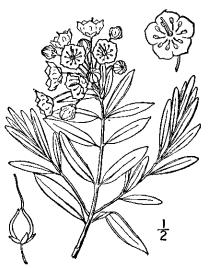


Kalmia latifolia L. Sp. Pl. 391. 1753. Kalmia latifolia myrtifolia Rand, Rhodod. 125. 1876.

A shrub with very stiff branches and terete twigs. often forming dense thickets, 3°-20° high, rarely becoming a tree with a maximum height of about 40° and trunk diameter of 18'. Leaves alternate, or some of them opposite, or rarely verticillate in 3's, petioled, glabrous, oval, ovate-lanceolate, or elliptic, usually acute at both ends, rarely narrowly oblonglanceolate, flat, green on both sides, persistent, 1'-5' long, 1'-11' wide; flowers 9"-12" broad, pink to white, numerous and showy in compound terminal corymbs; pedicels bracted and 2-bracteolate at the base, slender, ½'-1½' long, densely glandular, erect, even in fruit; calyx and corolla glandular; capsule depressed-globose, 5-lobed, glandular, 2"-3" in diameter; calyx and filiform style long-persistent, the latter falling when the capsule begins to open.

In woods, preferring sandy or rocky soil, New Brunswick to Ontario, Indiana, western Kentucky, Florida and Louisiana. Wood very hard, brown; weight per cubic foot 44 lbs. Clamoun. Spoonwood. Broadleaved kalmia. Ivy-bush. Wood- or small laurel. Bigleaved ivy. Spoonhunt. May-June.



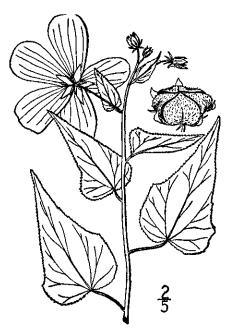


Kalmia polifòlia Wang. Pale or Swamp Laurel.

K. polifolia Wang. Beob. Ges. Naturf. Freunde Berlin 2: Part 2, 130. 1788. Kalmia glauca Ait. Hort. Kew. 2: 64. pl 8. 1811.

A glabrous shrub, 6'-2° high, with erect or ascending branches, the twigs 2-edged. Leaves opposite or sometimes in 3's, very nearly sessile, oblong or linear-oblong, mostly obtuse at the apex, narrowed at the base, green above, white-glaucous beneath, $\frac{1}{2}$ -2' long, 2"-6" wide, the margins revolute, often strongly so; flowers in simple umbels terminating the branches, few (1-13), purple, 5"-9" broad; pedicels filiform, ½-1½ long, erect, even in fruit; calvx-segments ovate, scarious-margined, acutish or obtuse, persistent; capsule depressed-globose, glabrous, about 2½" in diameter.

In bogs, Newfoundland to Hudson Bay and Alaska, south to Connecticut, northern New Jersey, Pennsylvania, Michigan, in the Rocky Mountains to Montana, and in the Sierra Nevada to California. Summer.



Kosteletzkya virginica (L.) A. Gray. Virginia Kosteletzkya.

Hibiscus virginicus L. Sp. Pl. 697. 1753. K. virginica A. Gray, Gen. 2: 80, t. 132. 1849. K. virginica var. althaeifolia Chapm. Fl. S. States 57. 1860. K. althaeifolia A. Gray; S. Wats. Bibl. Index 136.

Perennial, erect, branching, 2°-4° high, more or less stellate-pubescent and scabrous. Leaves ovate, or hastate, truncate or cordate at the base, 2'-5' long, unequally dentate and often 3-lobed below, sometimes with an additional lobe or two at the middle, acute, velvety or pubescent; flowers pink, 1½'-2½' broad, in loose terminal leafy panicles; bractlets of the involucels 8-9, linear, shorter than the lanceolate acute calyx-segments; capsule hispid-pubescent.

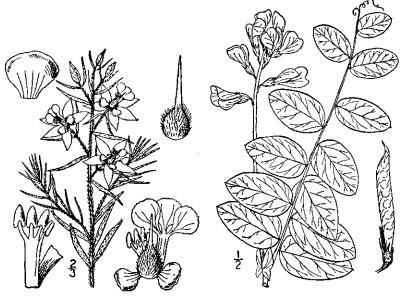
In salt or brackish marshes, southeastern New York to Florida and Louisiana. Bermuda: Cuba. Aug.

Krameria lanceolàta Torr. Linear-Jeaved Krameria.

K. lanceolata Torr. Ann. Lyc. N. Y. 2: 166. 1828.

A perennial appressed-pubescent herb from a thick woody root, the stems prostrate or ascending, branched, often 1° long or more. Leaves numerous, linear, linear-lanceolate or linear-oblong, sessile, simple, entire, about 1' long. ½"-2" wide, acute, tipped with a minute prickle; peduncles solitary, axillary, 1-flowered, sometimes secund, as long as the leaves, or shorter, bearing 2 leaf-like bracts just below the flower; flowers about 1' broad, the sepals purple within, pubescent without; claws of the 3 upper petals united; stamens 4, monadelphous; fruit globose, pubescent, very spiny, about ½' in diameter.

Florida to Kansas, New Mexico and Mexico. April-June. Referred in our first edition to the Mexican K. secundiflora DC., which it resembles.

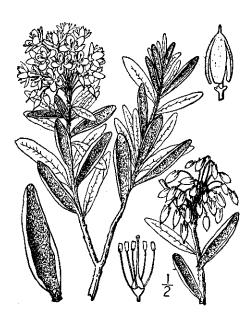


Lathyrus venòsus Muhl. Veiny Pea.

Lathyrus venosus Muhl.; Willd. Sp. Pl. 3: 1092. 1803.

Finely pubescent or glabrous, perennial, ascending, climbing or decumbent, 2°-3° long. Stems strongly 4-angled; stipules lanceolate, half-sagittate, acute or acuminate, 4"-12" long, much smaller than the leaflets; leaves petioled; leaflets 4-7 pairs, ovate or oval, obtuse or acutish and mucronulate at the apex, mostly rounded at the base, 1'-2' long; tendrils branched; peduncles shorter than the leaves; flowers purple, 6"-8" long; calyx pubescent or glabrous; pod linear, sessile, glabrous, veined, 1½-3' long, about 3" wide.

River shores and banks, western New Jersey and Pennsylvania to Ontario, Indiana, Saskatchewan, Georgia, Louisiana and Arkansas. Ascends to 3500 feet in Virginia. Leaflets often strongly reticulated, May-July.



Ledum groenlándicum Oeder. Labrador Tea.

Ledum groenlandicum Oeder, Fl. Dan. pl. 567.

Ledum latifolium Ait. Hort. Kew. 2: 65. 1789.

A shrub, 1°-4° high, similar to the preceding species, the twigs densely tomentose. Leaves oblong, obtuse, 1'-2' long, 3'-8" wide, green and slightly rugose above, densely browntomentose beneath, strongly revolute-margined; flowers 4"-5" broad, umbellate or shortcorymbose; pedicels brown-canescent or tomentose, 10"-12" long and recurved in fruit; stamens 5-7; capsule oblong, canescent, nodding, 3"-3½" long, 1"-1½" in diameter.

In bogs and swamps, Greenland; Labrador to British Columbia, Massachusetts, eastern Pennsylvania, Wisconsin, Saskatchewan and Washington. May-Aug.

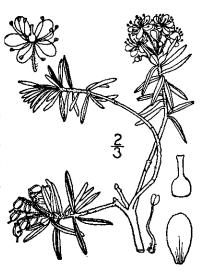
Ledum palustre ssp. decumbens (Ait.) Hultén

Narrow leaved Labrador Tea.

L. palustre decumbens Ait. Hort. Kew. 2: 65. 1789. L. decumbens Lodd.; Steud. Nomencl. Ed. 2, 20. 1841.

A shrub, about 1° high, the twigs rusty-tomentose. Leaves linear, obtuse, dark green and somewhat rugose above, densely tomentose with brown wool beneath, strongly revolute-margined, ½-¾' long, 1"-2" wide; flowers 3"-5" broad; pedicels very pubescent, 4"-8" long in fruit; stamens 10; capsule obovoid or oval, scurfy, about 2" high and 1½" in diameter, nodding; calyx-teeth less than ½" long, broadly ovate to half-orbicular, obtuse.

In bogs, Newfoundland to Maine and Quebec, west to Alaska. Also in northern Asia. In our first edition included in L. palustre L., of Europe and Asia. Summer.



Lepidium sativum L. Garden, Town or Golden Pepper-grass or Cress.

Lepidium sativum L. Sp. Pl. 644. 1753.

Annual, glabrous, bright green, stem slender, usually much branched, about 1° high. Lower leaves 2-pinnate, or pinnate with the segments lobed or pinnatifid, 3'-7' long, the lobes entire or incised; upper leaves sessile or nearly so, entire or incised, much smaller; flowers in loose elongated racemes, about 1" broad; petals present; stamens 6; silicles ovate-oval, about 2" high and 1" wide, equalling or longer than their pedicels, emarginate, winged all around; style short.

In waste places, Quebec to New York and British Columbia. Escaped from gardens. Native of Europe. Much cultivated for its pungent foliage. Petals often pinkish. Tongue-grass. May-Aug.

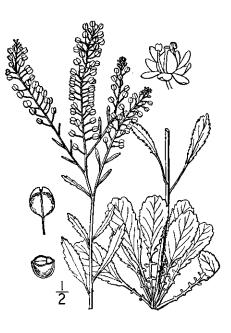


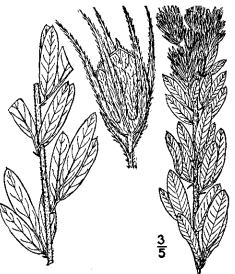
Lepidium virginicum L. Wild Peppergrass.

Lepidium virginicum L. Sp. Pl. 645. 1753.

Basal leaves obovate or spatulate in outline, generally with a large terminal lobe and numerous small lateral ones, all dentate, glabrous or slightly pubescent; stem-leaves lanceolate or oblong-linear, sharply dentate or entire, sessile, or the lower stalked; flowers ½"-1" broad, white, petals generally present, sometimes wanting in the later flowers; stamens 2; pedicels very slender, spreading, 2"-3" long in fruit; pod flat, short-oval or orbicular, minutely winged above; cotyledons accumbent.

In fields and along roadsides, Quebec to Minnesota. Colorado, Florida, Texas and Mexico. Also in the West Indies, and introduced as a weed into southern Europe. Bird's-pepper. Tongue-grass. May-Nov.





Lespedeza capitàta Michx. Roundheaded Bush-clover.

L. capitata Michx. Fl. Bor. Am. 2: 71. 1803. Lespedeza capitata var sericea H. & A. Comp. Bot.

Mag. 1: 23. 1835.

Lespedeza frutescens Ell. Bot S. C. 2: 206. 1824.

L. Bicknellii House, Torreya 5: 167. 1905.

L. velutina Bicknell, Torreya 1: 102. 1901.

Stiff, erect or ascending, mainly simple and wand-like, silky, silvery pubescent, or somewhat villous, 2°-5½° high. Stipules subulate; leaves nearly sessile; leaflets oblong, linear-oblong or narrowly elliptic, obtuse or acute at each end, 1'-1½' long, 3"-5" wide; peduncles much shorter than the leaves, or the dense globose-oblong heads sessile in the upper axils; flowers all complete; corolla yellowish-white, with a purple spot on the standard, 3" long; pod ovate-oblong, pubescent, about half as long as the calyx-lobes.

Dry fields, Ontario and Maine to Florida, Minnesota, Nebraska, Arkansas and Louisiana. Races differ in pubescence and in width of leaflets. Aug.—Sept. Dusty-clover.



Leucothoë axillàris (Lam.) D. Don. Downy Leucothoë.

Andromeda axillaris Lam. Encycl. 1: 157. 1783.

Leucothoë axillaris D. Don, Edinb. New Phil.

Journ. 17: 159. 1834.

A shrub, 2°-5° high, the twigs puberulent, at least when young. Leaves coriaceous, evergreen, oval to oblong-lanceolate, glabrous and dark green above, paler and sparsely beset with minute hairs beneath, acute or acuminate at the apex, narrowed or rarely rounded at the base, serrulate, at least near the apex, 2'-6' long, ½'-1½' wide; petioles usually pubescent, 2''-4'' long; racemes many-flowered, dense, catkin-like when expanding, sessile in the axils of the persistent leaves; bracts ovate, concave, persistent, borne near the base of the short pedicels; sepals broadly ovate, obtuse, imbricated even when expanded; corolla nearly cylindric, about 3'' long; stigma depressed, 5-rayed.

In moist woods, Virginia to Florida and Alabama, near the coast. April.

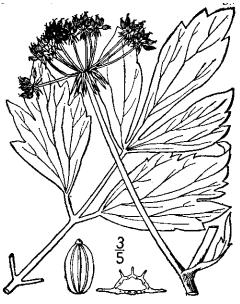
Levisticum officinale W.D.J. Koch

Lovage.

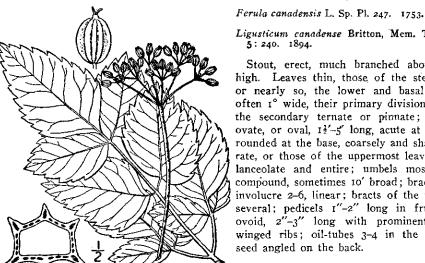
Ligusticum Levisticum L. Sp. Pl. 250. 1753. Levisticum officinale Koch, Nov. Act Nat. Cur. 121: 101, 1824. Levisticum Levisticum Karst. Deutsch. Fl. 844.

Stout, branched, 6° high or less, glabrous, except the puberulent pedicels, the rootstock stout, yellowish. Leaf-segments broadly ovate or oblong, 2'-3' long, often 2' wide, entire and cuneate at the base, sharply and coarsely lobed or toothed above the middle; umbels 2'-3' broad, the rays stout; pedicels short, about 2' long, about as long as the fruits.

Roadsides and waste grounds, escaped from cultivation, Vermont to Pennsylvania. Native of southern Europe, June-Aug.



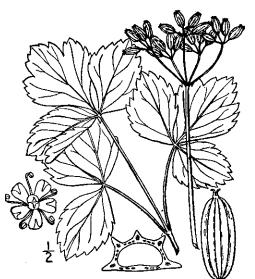
Ligusticum canadénse (L.) Britton. Nondo. Angelico.



Ligusticum canadense Britton, Mem. Torr. Club 5: 240. 1894.

Stout, erect, much branched above, 2°-6° high. Leaves thin, those of the stem sessile or nearly so, the lower and basal petioled, often 1° wide, their primary divisions ternate, the secondary ternate or pinnate; segments ovate, or oval, 1½-5' long, acute at the apex, rounded at the base, coarsely and sharply serrate, or those of the uppermost leaves linearlanceolate and entire; umbels mostly twice compound, sometimes 10' broad; bracts of the involucre 2-6, linear; bracts of the involucels several; pedicels I"-2" long in fruit; fruit ovoid, 2"-3" long with prominent slightly winged ribs; oil-tubes 3-4 in the intervals; seed angled on the back.

In rich woods, southern Pennsylvania to Georgia, Missouri and Kentucky. Ascends to 4000 ft. in North Carolina. June-Aug.



Ligusticum scóticum L. Scotch or Sea Lovage. Sea Parslev.

Ligusticum scoticum L. Sp. Pl. 250. 1753.

Stem simple, or rarely slightly branched, 10'-3° high. Leaves mostly biternate, the segments thick and fleshy, broadly obovateovate or oval, 1'-4' long, shining, obtuse or acute at the apex, narrowed or the terminal one rounded at the base, dentate with blunt or sharp teeth; umbels 2'-4' broad in fruit, the rays 1'-3' long; pedicels 2"-5" long; fruit oblong, 3"-5" long, the ribs prominent and somewhat winged; seeds rounded on the back.

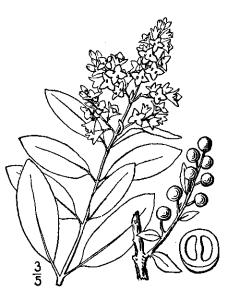
Along salt marshes, New York to Labrador and the lower St. Lawrence river. Also on the Pacific coast and the shores of northern Europe and Asia. The plant of the New England coast has more acute leaf-segments than the typical form. Shunis, July-Aug.

Ligustrum vulgàre L. Privet. Prim.

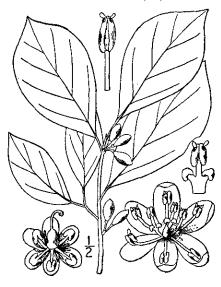
Ligustrum vulgare L. Sp. Pl. 7. 1753.

A shrub, 6°-10° high, the branches long and slender. Leaves firm, tardily deciduous, glabrous, lanceolate or oblong, acute or obtuse at the apex. narrowed at the base, short-petioled, 9"-2' long, 3"-7" wide, obscurely veined; panicles dense, short, minutely pubescent; flowers white, about 3" broad; pedicels very short; stamens included; berries globose, black, 2"-3" in diameter.

In thickets and along roadsides, escaped from cultivation, Maine and Massachusetts to Ontario, western New York, Pennsylvania and North Carolina. Native of Europe and Asia. Used for hedges. June-July. Old English names, primwort, print, skedge, skedgwith.



Lindera benzoin (L.) Blume

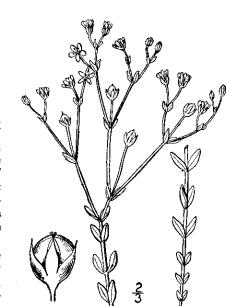


Spice-bush or -wood. Benjamin-bush.

Laurus aestivalis L. Sp. Pl. 370. 1753. Laurus Benzoin L. Sp. Pl. 370. 1753. Benzoin aestivale Nees, Syst. Laur. 495. 1836. Lindera Benzoin Blume, Mus. Bot. Lugd. 1: 324. 1857. B. Benzoin Coulter, Mem. Torr. Club 5: 164. 1894.

A glabrous or nearly glabrous shrub, 4°-20° high, with smooth bark and slender twigs. Leaves obovate oval or elliptic, 2'-5' long, 1'-2½' wide, acute, short-acuminate or some of them rounded at the apex, narrowed at the base, pale beneath; petioles 3"-6" long; flowers about 1½" broad, bright yellow, fragrant; pedicels about equalling the calyx-segments; anthers oval, minutely emarginate at the summit; ovary about as long as the style; drupe 4"-5" long, about 3" in diameter.

In moist woods, thickets and along streams, Maine and New Hampshire to Ontario, Michigan, North Carolina, Tennessee and Kansas. March-May. Fruit ripe Aug.-Sept. Ascends to 2500 ft. in Virginia. Snap-wood or -weed. Feverbush. Wild allspice. Leaves of young shoots much larger.



Linum catharticum L.

Dwarf or Cathartic Flax.

Linum catharticum L. Sp. Pl. 281. 1753.

Cathartolinum catharticum Small, N. A. Fl. 251: 74.

Annual, slender, glabrous, usually branched, 3'-8 high. Leaves all opposite, sessile, oval or somewhat obovate, entire, 2"-4" long; flowers axillary and terminal, white, 2"-3" broad, on long slender erect or ascending pedicels; sepals lanceolate, acute or acuminate; petals obovate; pod small, globose.

Along low sandy seashore, Pictou, Nova Scotia and in Ontario. Naturalized from Europe where it is abundant on chalky soils. Called also fairy, mountain, mill-mountain, or purging flax. Fairy lint. July-Aug.

Linum Lewisii Pursh. Lewis' Wild Flax.

Linum Lewisii Pursh, Fl. Am. Sept. 210. 1814. Linum perenne var Lewisii Eat. & Wright, N. A. Bot. 302. 1840.

Perennial by a woody root, $1^{\circ}-2^{\circ}$ high, glabrous, glaucous, densely tufted, simple up to the cymose inflorescence. Leaves crowded, oblong or linear, 3''-20'' long, $\frac{1}{2}''-2''$ wide, acute or acutish, 3-5-nerved; flowers blue, $1'-1\frac{1}{2}'$ broad; sepals oval, mainly obtuse, one-third or one-fourth the length of the petals; stigmas shorter than the styles; capsule broadly ovoid, 2-3 times as long as the calyx, obtuse, incompletely 10-celled, dehiscent, the septa ciliate.

Prairies, Manitoba to South Dakota, Wisconsin, Texas, Arizona, Utah and Alaska. Prairie-flax. Summer.

The European L. perenne L., otherwise nearly identical with this species, differs in having heterogonous flowers.





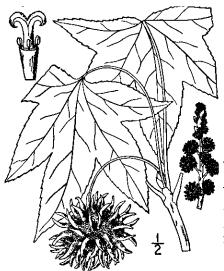
Linum usitatíssimum L.

Flax. Lint-bells. Linseed.

Linum usitatissimum L. Sp. Pl. 277. 1753.

Annual, often tufted, erect, branching above, 12'-20' high, glabrous and somewhat glaucous. Stem terete, striate, the branches slightly angular; leaves alternate, 3-nerved, lanceolate, ½'-1½' long, 1''-3'' wide, acute or acuminate; stipules none; inflorescence a terminal cymose leafy panicle; flowers blue, 6''-8'' broad; pedicels slender; sepals oval, acuminate, the interior ones ciliate and 3-ribbed; petals cuneate, crenulate, twice the length of the sepals; capsule ovoid-conic, 3''-4'' long, equalling or somewhat exceeding the sepals, indehiscent, incompletely 10-celled, the septa not ciliate; seeds compressed.

Along roadsides, railways and in waste places, fugitive from Europe or from cultivation. Called also flix, lin, lint. Cultivated flax. Summer.



Liquidambar Styracíflua L. Sweet Gum. Star-leaved or Red Gum.

Liquidambar Styraciflua L. Sp. Pl. 999. 1753.

A forest tree, maximum height about 150°; bark very rough, branches usually winged with corky ridges. Twigs glabrous or slightly pubescent; leaves broader than long, 3'-9' wide, subcordate at base, deeply 3-7-lobed, glabrous above, often pubescent in the axils of the veins beneath, the lobes triangular-ovate, acute, sharply and finely serrate; sterile flower-clusters erect or spreading,

conic, consisting of numerous small heads, greenish; tertile neads long-peduncied, at length drooping, borne near the base of the sterile; head of fruit about 1'-1½' in diameter, the fertile seeds few, with numerous minute sterile ones.

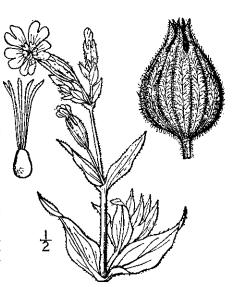
In low woods, Connecticut and southern New York to Florida, Illinois, Missouri and Mexico. Wood hard, not strong, reddish brown; weight per cubic foot 37 lbs. Leaves fragrant when bruised, brilliant in autumn. Its gum, copal-balsam or copalm, used as a substitute for storax. Satinwalnut. Opossum-tree. Bilsted. Alligator-tree. White-gum. Liquidamber. April-May.

Lychnis álba Mill. White Campion. Evening Lychnis.

Lychnis alba Mill. Gard. Dict. Ed. 8, no. 4. 1768. Lychnis vespertina Sibth. Fl. Oxon. 146. 1794.

Biennial, viscid-pubescent, loosely and freely branching, 1°-2° high. Leaves ovate-oblong or ovate-lanceolate, acute, 1′-3′ long, the lower tapering into a margined petiole, the upper sessile; flowers few, loosely paniculate, 9″-12″ broad, white or pinkish, opening at dusk and remaining open into the morning of the next day, slightly fragrant, often dioecious; calyx at first tubular, 6″-9″ long, about 2″ wide, swelling with the ripening pod so as to become ovoid and 6″-7″ in diameter, its teeth short, lanceolate; petals obovate, 2-cleft, crowned; teeth of the capsule 2-cleft, nearly erect.

In waste places and on ballast, Nova Scotia to Ontario, Michigan, New York and Pennsylvania. Adventive or naturalized from Europe. Snake-, cuckoor thunder-flower. Bull- or cow-rattle. White-robin. Summer.

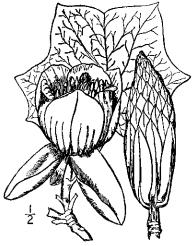


Liriodendron Tulipífera L. Tulip-tree. Lime-tree. White-wood.

Liriodendron Tulipifera L. Sp. Pl. 535. 1753.

A magnificent tree 60°-190° high with diverging curved branches, the trunk 4°-12° in diameter. Leaves glabrous, very broadly ovate or nearly orbicular in outline, truncate or broadly notched at the apex, truncate, rounded or cordate at the base, 3'-6' long with 2 apical and 2-4 basal lobes, or occasionally entire; flowers about 2' high, erect, greenish-yellow, orange-colored within; petals obovate, obtuse, about equalling the reflexed sepals; cone of fruit dry, oblong, acute, 3' long.

In woods, Vermont to Rhode Island, Florida, Michigan, Arkansas and Mississippi. May-June. Wood soft, yellowish or brownish; sap-wood nearly white. Weight per cubic foot 26 lbs. Cucumber-tree. Blue-, white- or yellow-poplar. Lynn- or saddle-tree. Hickory- or tulip-poplar. Basswood. Saddle-leaf. Canoe-wood.

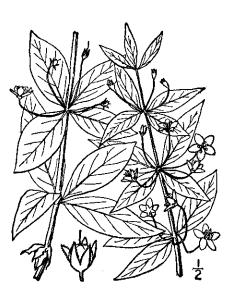


Lysimachia quadrifòlia L. Cross-wort. Whorled Loosestrife.

Lysimachia quadrifolia L. Sp. Pl. 147. 1753.

Pubescent, or glabrate, stem simple or rarely branched, slender, erect, 1°-3° high. Leaves verticillate in 3's-7's (commonly in 4's or 5's), or some, or very rarely all of them opposite, short-petioled or sessile, lanceolate, oblong or ovate, acute or acuminate at the apex, 1'-4' long, 3"-1½' wide, usually black-punctate, the uppermost sometimes very small; flowers axillary, 3"-6" broad, borne on filiform spreading peduncles ½'-1½' long; sepals narrowly lanceolate, acute or acuminate; corolla glabrous, dark-streaked or spotted; filaments monadelphous below; capsule nearly as long as the sepals.

In thickets, New Brunswick to Ontario, Minnesota, Tennessee, Georgia and Wisconsin. Five sisters. Yellow balm. Liberty-tea. June-Aug.



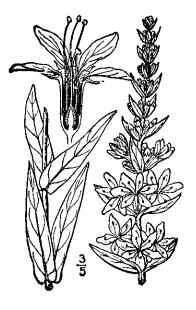
Lythrum Salicària L. Spiked or Purple Loosestrife

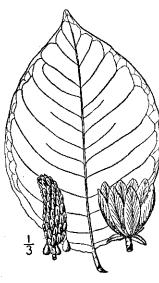
Lythrum Salicaria L. Sp. Pl. 446. 1753.

Perennial, erect, 2°-3° high, glabrous or pubescent, sometimes tomentose above, at length much branched. Leaves opposite or sometimes verticillate in 3's, sessile, lanceolate, cordate or clasping at the base, 2'-3' long, 3"-5" wide; flowers purple, trimorphous, 6"-8" broad, in dense compound terminal interrupted bracted spikes; stamens 8-10, alternately longer and shorter, even the longer ones little exserted; ovary short-stalked; fruiting calyx about 3" long; calyx-lobes shorter than the narrow appendages.

In swamps and wet meadows, Cape Breton Island to Ontario, south to southern New York, Delayare and the District of Columbia. Naturalized from Europe. June-Aug Widely distributed in the Old World. Spiked willowherb, long purples, soldiers. Purple-grass. Willow- or kill-weed. Sage-willow. Milk or purple willow-herb. Red sally. Rainbow-weed.

Lythrum virgàtum L., differing by leaves narrowed at the base, is recorded as established in eastern Massachusetts.





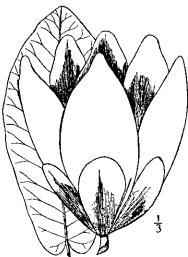
Magnolia acuminàta L. Cucumber-tree. Mountain Magnolia.

Magnolia virginiana var. acuminata L. Sp. Pl. 536. 1753.

Magnolia acuminata L. Sp. Pl. Ed. 2, 756. 1763.

A tree 60°-90° high, the trunk up to 4½° in diameter. Leaf-buds silky-pubescent; leaves scattered along the branches, 6′-10′ long, 3′-4′ wide, thin, oval, acute or somewhat acuminate, rounded or truncate at the base, light green and more or less pubescent on the lower surface, especially along the veins; petioles 1′-1½′ long; flowers oblong-campanulate, greenish-yellow, 2′ high; petals obovate or oblong, much longer than the spreading deciduous sepals; cone of fruit cylindric, 3′-4′ long, about 1′ in diameter, rose-colored when mature.

In woods, New York and Ontario to Illinois, Missouri, Georgia, Mississippi and Arkansas. Heart-wood soft, yellowish-brown; sap-wood lighter. Weight per cubic foot 29 lbs. Ascends to 4200 ft. in Virginia. Yellow or black linn. May-June.

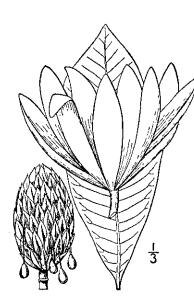


Magnolia macrophýlla Michx. Great-leaved Magnolia. Large-leaved Umbrella-tree, or Cucumber-tree.

Magnolia macrophylla Michx. Fl. Bor. Am. 1: 327. 1803.

A tree 20°-60° high, the trunk 6′-20′ in diameter, bark gray. Leaf-blades silky-pubescent; leaves oblong or obovate, blunt, cordate, 1°-3½° long, 8′-14′ broad, glabrous and green above, glaucous-white and pubescent beneath; petioles stout, 2′-4′ long; flowers 8″-15′ in diameter, white with a large purple center; petals ovate-oblong, obtuse, thrice the length of the rounded sepals; cone of fruit ovoid-cylindric, 4′-6′ long, bright rose-colored at maturity.

In woods, southeastern Kentucky to North Carolina, Florida, Arkansas and Louisiana. Heart-wood brown, satiny, hard; sap-wood light yellow; weight per cubic foot 33 lbs. Elk-bark. Silver-leaf. Big-bloom. May-June.



Magnolia tripétala L. Umbrella- or Cucumber-tree. Elk-wood.

Magnolia tripetala L. Sp. Pl. Ed. 2, 756. 1763. Magnolia virginiana var. tripetala L. Sp. Pl. 536. 1753. Magnolia umbrella Lam. Encycl. 3: 673. 1789.

A tree 20°-45° high, trunk 4′-18′ in diameter. Leafbuds glabrous; leaves clustered at the summits of the flowering branches, 1°-1½° long, 4′-8′ wide, obovate to oblanceolate, acute, cuneate at the base, dark green and glabrous above, light green and more or less pubescent beneath, at least when young; petioles stout, 1′-3′ long; flowers 8′-10′ in diameter, white, slightly odorous; sepals broad, reflexed, early deciduous; petals oblonglanceolate or obovate-lanceolate, acutish; cone of fruit 4′-6′ long, rose-colored when mature.

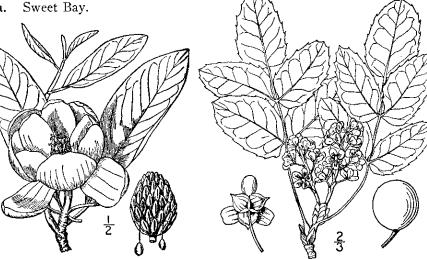
In woods, southeastern Pennsylvania to Georgia, west to Missouri, Arkansas and Mississippi. Heart-wood brown, soft; sap-wood white; weight per cubic foot 28 lbs. The name tripetala is in allusion to the 3 petaloid petals. May.

Magnolia virginiàna L. Laurel Magnolia. Sweet Bay

M. virginiana and var. glauca L. Sp. Pl. 535. 1753. Magnolia glauca L. Sp. Pl. Ed. 2, 755. 1763.

A shrub, or tree $15^{\circ}-75^{\circ}$ high, trunk $5'-3\frac{1}{2}^{\circ}$ in diameter. Leaf-buds pubescent; leaves scattered along the flowering branches, 3'-6' long, 1'-2' broad, oval or oblong, obtuse or blunt-acuminate, acute at the base, coriaceous, dark green above, glaucous and more or less pubescent beneath, deciduous in the North, persistent in the South; petioles about 1' long; flowers white, depressed-globose, deliciously fragrant, 2'-3' in diameter; sepals spreading, obtuse, nearly as large as the obovate rounded petals; cone of fruit oblong, $1\frac{1}{2}'-2'$ high, pink.

In swamps and swampy woods, eastern Massachusetts, Long Island, Lebanon County, Pa., and southward, mainly east of the Alleghanies to Florida, west through the Gulf States to Arkansas and Texas. Heart-wood soft, reddish-brown; sap-wood nearly white; weight 31 lbs. White-bay, swamp- or white-laurel. Swamp-magnolia or -sassafras, Beaver-tree. Indian-bark. May-June.



Mahonia aquifolium (Pursh) Nutt.

Trailing Mahonia.

Berberis Aquifolium Pursh, Fl. Am. Sept. 219.
1814.
Berberis repens Lindl. Bot. Reg. pl. 1176.
1828.
Mahonia repens Don, Gard. Dict. 1: 118.
0dostemon Aquifolium Rydb. Bull. Torr. Club
33: 141. 1906.

A low trailing glabrous shrub. Leaves petioled, pinnate; leaflets 3-7, ovate, oval, or nearly orbicular, obtuse or acute at the apex, oblique and obtuse, truncate or slightly cordate at the base, sessile, thick, persistent, finely reticulated, dentate with spine-bearing teeth, 1'-2' long; racemes several, erect, dense, terminal, many-flowered; flowers yellow, 3''-4'' broad, short-pedicelled; bracts ovate, persistent; berry globose, blue or purple, about 3'' in diameter.

Western Nebraska and throughout the Rocky Mountain region, extending to Arizona and British Columbia. Holly-leaf barberry. Grape-root. Rocky mountain or Oregon grape. April-May.

Malus coronària (L.) Mill. Narrow-leaved Crab Apple.

Pyrus coronaria L. Sp. Pl. 480. 1753.

Malus coronaria Mill. Gard. Diet. Ed. 8, no. 2. 1768.

Pyrus angustifolia Ait. Hort. Kew. 2: 176. 1789.

Malus angustifolia Michx. Fl. Bor. Am. 1: 292. 1803.

Malus lancifolia Rehder, Trees & Shrubs 2: 141. 1911.

A small tree, sometimes 20° high and the trunk 10′ in diameter. Leaves oblong, oblong-lanceolate or oval, thick, shining and dark green above, glabrous when mature, sometimes pubescent beneath when young, dentate or often entire, or those of sterile shoots often lobed, obtusish or acute at the apex, narrowed at the base, 1′-2′ long; cymes fewflowered; pedicels 1′-1½′ long, slender; flowers pink, fragrant, mostly less than 1′ broad; styles nearly separate; calyx-lobes early deciduous; pome about 1′ in diameter, yellowish, hard.

In thickets, New Jersey to Illinois and Missouri, south to Florida and Louisiana. Recorded from Kansas. Wood hard, reddish brown; weight per cubic foot 43 lbs. Crab-apple or -tree, Wild crab. Southern wild crab. March-May.



Malus sylvestris P. Mill.

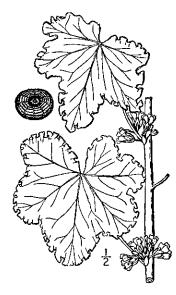
Apple. Scarb- or Wilding-tree.

Pyrus Malus L. Sp. Pl. 479. 1753. Malus sylvestris Mill. Gard. Dict. Ed. 8, no. 1. 1768.

A large tree with spreading branches, the trunk sometimes reaching a diameter of 3° in cultivation. Leaves petioled, broadly ovate or oval, obtuse or abruptly pointed at the apex, rounded or slightly cordate at the base 1'-3' long, dentate or nearly entire, glabrous or nearly so above, pubescent and often woolly beneath, especially when young; pedicels generally tomentose, 1'-2' long; flowers pink, or white, 1½'-3' broad; calyx tomentose; fruit depressed-globose or elongated, hollowed at the base, 1½'-3' in diameter.

In woods and thickets, frequent in southern New England, New York, New Jersey and Pennsylvania. Our common apple, introduced from Europe and escaped from cultivation. Native also of western Asia. Wood hard, reddish brown; weight per cubic foot 50 lbs. Crab-tree or -stock, Nurse-garden. April-Mav.

The cultivated crab apples are mainly hybrids of this with M. baccata and are occasionally spontaneous.



Malva crispa (L.) L.

Whorled Mallow.

Curled Mallow.

Malva verticillata L. Sp. Pl. 689, 1753. Malva crispa L. Sp. Pl. Ed. 2, 970. 1763. Malva verticillata crispa L. Sp. Pl. 689, 1753.

Annual, erect, glabrous or nearly so, 4°-6° high. Leaves nearly orbicular with 5-11 shallow, angular dentate lobes, their margins often wrinkled and crisped; petioles elongated; flowers white or whitish, sessile, clustered in the axils, about the size of those of *M. rotundifolia*; petals about twice the length of the calyx-lobes; carpels rugose-reticulated.

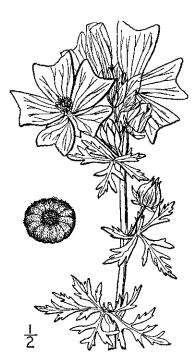
In waste places. Nova Scotia to Quebec, South Dakota and Pennsylvania. Adventive from Europe. Summer.

Malva moschàta L. Musk Mallow. Muskplant. Musk.

Malva moschata L. Sp. Pl. 690. 1753.

Perennial, erect, 1°-2° high, branching, pubescent with long hairs, or glabrate. Basal leaves orbicular, 3'-4' wide, with 5-9 short broad rounded dentate lobes; stem-leaves deeply divided into linear or cuncate, pinnatifid or cleft segments; flowers 1½'-2' broad, pink or white, racemosely clustered at the summits of the stem and branches; petals obcordate or emarginate, 5-8 times as long as the triangular-ovate acute calyx-lobes; carpels 15-20, densely hairy, rounded on the back.

In waste places and along roadsides, Nova Scotia to Ontario, British Columbia, New Jersey, Virginia, Wisconsin and Oregon. Naturalized from Europe. Plant with a faint odor of musk. Summer.

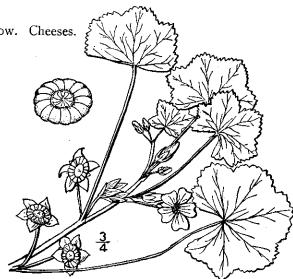


Malva neglecta Wallr.

Low, Dwarf or Running Mallow. Cheeses.

M. rotundifolia L. Sp. Pl. 688. 1753. Annual or biennial, procumbent and spreading from a deep root, branched at the base, stems 4'-12' long. Leaves orbicular-reniform, 1'-3' wide, cordate, with 5-9 broad shallow dentate-crenate lobes; perioles slender, 3'-6' long; flowers clustered in the axils, pale blue, 4"-7" broad; pedicels 6"-15" long; petals about twice the length of the ovate acute calyx-lobes; carpels about 15, rounded on the back, pubescent.

In waste places, common nearly throughout our territory, and widely distributed as a weed in other temperate regions. Naturalized from Europe. Native also of western Asia. English names, dutch-cheese, doll or fairy cheeses, pellas, Blue, common or country mallow. Malice. May-Nov.



Malva sylvéstris L. High Mallow.

Malva sylvestris L. Sp. Pl. 689. 1753.

Biennial, erect or ascending, branched, pubescent with loose spreading hairs, or glabrate. Leaves orbicular, or reniform, 1½'-4' wide, with 5-9 shallow angular or rounded lobes, crenate-denate, truncate or cordate at the base; petioles 2'-6' long; flowers reddish-purple, 2-4 times as long as the calyx; carpels about Io, flat I'-1½' broad, in axillary clusters; pedicels slender; petals on the back, rugose-reticulate.

In waste places and along roadsides, sparingly adventive from Europe in the United States, Canada and Mexico, escaped from cultivation. Native also in Siberia. Summer. English names, common mallow, cheese-flower, cheese-cake, pick-cheese, round dock, maul. Country-mallow.



Medicago sativa L. Purple Medic. Alfalfa. Lucerne. Burgundy, Chilian or Brazilian Clover. Snail Clover.

Medicago sativa L. Sp. Pl. 778. 1753.

Perennial, much branched, decumbent or ascending, $1^{\circ}-1\frac{1}{2}^{\circ}$ high, the young shoots and leaves with some scattered hairs, glabrous when mature. Leaves petioled; leaflets oblanceolate or obovate, 2''-12'' long, dentate, especially toward the apex, obtuse, truncate or emarginate and often mucronate, narrowed or cuneate at the base; stipules entire; peduncles $\frac{1}{2}'-2'$ long, bearing a dense short raceme of violet or blue flowers; petals about 3'' long; pod pubescent, twisted into 2 or 3 spires.

In fields and waste places, New England and Ontario to Minnesota, south to Virginia and Kansas. Much cultivated for fodder in the southern and western States. Introduced from Europe. Great or spanish trefoil. Holy-hay. Sainfoin. Summer.

Medicago falcata L., similar to this, but with yellow flowers and nearly flat, scarcely coiled pods, is occasionally found in waste places. Native of Europe.



Melilotus albus Medik.

White Melilot. White Sweet-clover. Honey.

Melilotus alba Desv. in Lam. Encycl. 4:63. 1797.

M. vulgaris Willd. Enum. Hort. Berol. 790. 1809.

Erect or ascending, 3°-10° high, branching, glabrous, or the young twigs and leaves finely pubescent. Leaves petioled, rather distant; leaflets oblong or slightly oblanceolate, serrate, narrowed at the base, truncate, emarginate or rounded at the apex, 6"-10" long, 2"-5," wide; stipules subulate; racemes numerous, slender, 2'-4' long, often 1-sided; pedicels 1" long or less; flowers white; standard 2"-2½" long, slightly longer than the wings; pod ovoid, slightly reticulated, glabrous, 1½" long.

In waste places, frequent throughout our area and in the Southern States. Adventive or naturalized from Europe, and native also of Asia. White millet. Honey-lotus. Cabul-, tree-, honey- or bokhara-clover. Leaves fragrant in drying, as in other species of the genus. June-Nov.



Melilotus officinalis (L.) Lam.

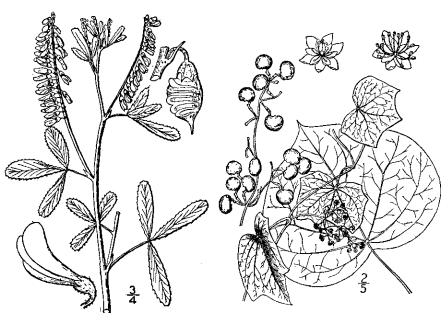
Yellow Melilot, Yellow Sweet-clover.

Trifolium Melilotus officinalis L. Sp. Pl. 765. 1753. Melilotus vulgaris Hill, Brit. Herb. 308. 1756. Melilotus officinalis Lam. Fl. Fr. 2: 594. 1778.

Resembling the preceding species, but the flowers are yellow. Standard about equalling the wings and keel; leaflets oblong, oblanceolate, or oval, serrate, the apex rounded, not truncate; pod about 2" long, with irregularly reticulated veins, often slightly pubescent with appressed hairs.

In waste places, frequent throughout our area and in the southern States. Adventive or naturalized from Europe. Native also of Asia. Summer, blooming later than M. alba, where the two grow together in southern New York. Old English names, balsamflowers, hart's-clover, king's-clover, king's-crown, heartwort. Plaster-clover.

Melilotus indica (L.) All., introduced on ballast about the seaports, and an abundant weed in the Far West, may be readily distinguished from this by its much smaller yellow flowers and smaller pods.



Menispermum canadénse L. Canada Moonseed.

Menispermum canadense L. Sp. Pl. 340. 1753.

Stem climbing over bushes or walls, 6°-12° in length, slender, slightly pubescent, or glabrous. Leaves slender-petioled, very broadly ovate, 4'-8' wide, cordate or sometimes nearly truncate at base, acuminate, acute or obtuse, entire or with 3-7 lobes, pale beneath, peltate near the base, although the petiole is sometimes inserted so near the margin that this character is not apparent; flowers white, 2" wide; panicles loose, bracteolate; drupe globose-oblong, 3"-4" in diameter, the stone spirally curved.

In woods along streams, western Quebec to Manitoba, south to Georgia, Nebraska and Arkansas. Ascends to 2600 ft. in Virginia. Bunches of fruit bluish black, with the aspect of small grapes. Texas or yellow sarsaparilla. Yellow parilla. June-July.

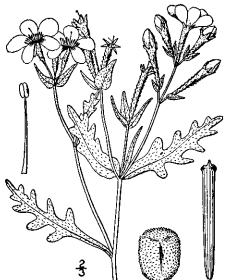
Mentzelia albicaùlis Dougl. Whitestemmed Mentzelia.

Mentzelia albicaulis Dougl.; T. & G. Fl. N. A. 1: 534. 1840.

Bartonia albicaulis Dougl.; Hook. Fl. Bor. Am. 1: 222, 1833.

Stem nearly white, erect or ascending, slender, branched, shining, nearly smooth, or roughish above, 6'-2° high. Leaves sessile, mostly lanceolate in outline, sinuate-pinnatifid, sinuate-lobed, or the upper and lower sometimes entire, rough with short stiff hairs, 1'-3' long; flowers yellow, few together at the ends of the branches, or also axillary, 6"-10" broad, short-pedicelled or sessile; calyx-lobes linear-lanceolate, about 2" long; filaments separate; capsule linear, 1' long or less, many-seeded; seeds angled, tuberculate, wingless.

Western Nebraska to British Columbia, California and New Mexico. May-July.

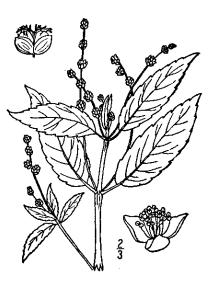


Mercurialis ánnua L. Herb Mercury.

Mercurialis annua L. Sp. Pt. 1035. 1753.

Annual, glabrous. Stems 8'-2° tall, more or less widely branched; leaves thinnish, ovate to lanceolate, acute or slightly acuminate, serrate with rounded teeth, or crenate; petioles 2½"-7½" long; staminate flowers in interrupted spikes which surpass the leaves; pistillate flowers clustered in the axils; capsules 2-lohed, 2"-2½" broad, hispid; seeds subglobose, ¾" in diameter, pitted.

In waste places, Nova Scotia to Florida, Ohio and Texas; Bermuda. Native of Europe and Africa.



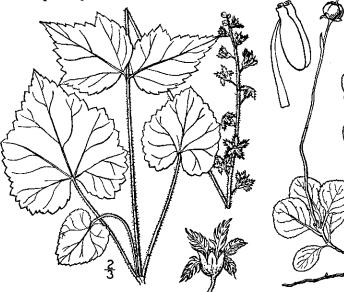
Mitella diphýlla L. Two-leaved Bishop's Cap or Mitre-wort.

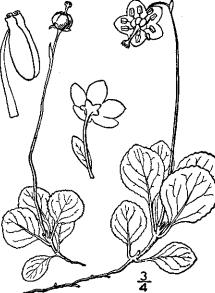
Mitella diphylla L. Sp. Pl. 406. 1753.

Scape 10'-18' high, pubescent, bearing a pair of opposite nearly or quite sessile leaves near its middle. Basal leaves broadly ovate, cordate at the base, acute or acuminate at the apex, 3-5-lobed, dentate, scabrous and with scattered hairs on both sides, 1'-2' long; leaves of the scape similar, usually smaller; spiciform raceme erect, 3'-8' long, the flowers distant; calyx-lobes and petals white; capsule flattish, broad, dehiscent above, the valves spreading.

In rich woods, Quebec to Minnesota, North Carolina and Missouri. Ascends to 2600 ft. in Virginia. A third leaf is rarely borne on the scape at the base of the inflorescence. Currant-leaf. False sanicle. Fringe- or fairy-cup. April-May.

Mitella oppositifòlia Rydb., native in central New York, and cultivated at South Hadley, Massachusetts, differs from M. diphylla in the long-petioled stem-leaves, the lanceolate calyx-lobes and the filiform divisions of the petals.





Moneses uniflòra (L.) A. Gray. One-flowered Wintergreen.

Pyrola uniflora L. Sp. Pl. 397. 1753.

Moneses grandiflora S. F. Gray, Arr. Brit. Pl. 2: 403, 1821.

Moneses uniflora A. Gray, Man. 273. 1848,

Stem bearing 1-3 pairs or whorls of leaves at the base, continued above into a bracted or naked scape 2'-6' high. Blades orbicular or ovate, obtuse at the apex, narrowed, rounded or sometimes subcordate at the base, rather thin, 4"-12" long, longer than or equalling their petioles; flower fragrant, 6"-10" broad; calyxlobes ovate, obtuse, about one-fifth the length of the petals; capsule erect, 3"-4" in diameter, about as long as the persistent style and conspicuously lobed stigma.

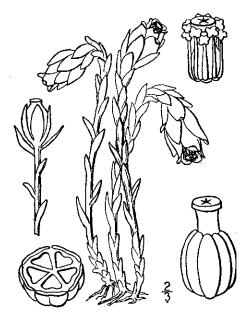
In woods, Labrador to Alaska, south to Connecticut, Pennsylvania, Michigan, in the Rocky Mountains to Colorado and to Oregon. Ascends to 4000 ft. in the Adirondacks. Also in Europe and Asia. June-Aug.

Monotropa uniflòra L. Indian Pipe.

Monotropa uniflora L. Sp. Pl. 387. 1753.

Scapes white, glabrous, usually clustered, 4'-10' high from a mass of matted brittle roots. turning dark in drving. Flower terminal, inodorous, nodding, oblong-campanulate, ½'-1' long, the fruit becoming erect; petals 4-5 (rarely 6), puberulent within, white, rather longer than the usually 10 stamens; filaments pubescent: ovary ovoid, acute, narrowed into the short style; capsule crect, obtusely angled, 5"-8" high, 4"-5" in diameter.

In moist rich woods, Anticosti to Florida, west to Washington and California, almost throughout temperate and warm North America and in Mexico. Ascends to 4200 ft. in North Carolina. Also in Japan and the Himalayas. Whole plant occasionally pink or red. American ice-plant. Gbost-flower, Corpse-plant, Eyebright, Convulsion-weed or -root. Dutchman's-pipe. Fit-root plant. Bird's-nest or pipe-plant. Fairy-smoke. June-Aug.

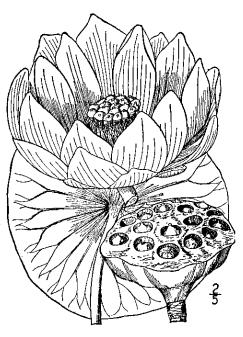


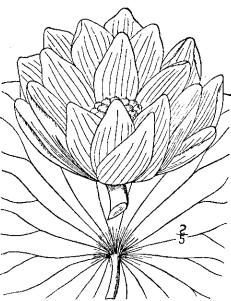
Nelumbo lùtea (Willd.) Pers. American Nelumbo or Lotus.

Nelumbium luteum Willd. Sp. Pl. 2: 1259. 1799. Nelumbo lutea Pers, Syn. 1: 92. 1805.

Rootstock nearly horizontal, tuberiferous. Emersed leaves 1°-2° broad, nearly orbicular but often somewhat constricted in the middle. centrally peltate, raised high out of water or floating, prominently ribbed, glabrous above, more or less pubescent and lepidote beneath, the lower surface marked with an oblong, transverse area; petioles and peduncles thick, 3°-7° long, with several large air-canals; flowers pale yellow, 4'-10' broad; petals concave, obovate, obtuse; anthers appendaged; fruit obconic or somewhat hemispheric, 3'-4' long; seeds nearly globular, 6" in diameter.

In rivers and lakes, locally distributed from Massachusetts to Minnesota, Nebraska and Louisiana. Cuba. N. jamaicensis, of Jamaica, closely resembles this species, but may be specifically distinct. Tubers and seeds farinaceous, edible. Great yellow water-lily. Water-chinkapin. Wankapin or yankapin. Duck-acorn. Rattle- or water-nut. July-Aug.





Nelumbo nucifera Gaertn.

Sacred Bean. Indian Lotus.

Nymphaea Nelumbo L. Sp. Pl. 511. 1753. pl. 19. 1788. Nelumbium speciosum Willd. Sp. Pl. 2: 1258. N. Nelumbo Karst. Deutsch. Fl. 553. 1880-83.

Leaves 2°-3° in diameter, high exserted above the water or some of them floating, thin, concave, glaucous; petioles and peduncles 3°-6° long, glabrous or with scattered minute prickles; flowers 4'-10' broad, pink or sometimes white; petals oblong or elliptic, obtuse; fruit obconic, 4'-5' long, 3'-4' in diameter; seeds oblong or ovoid.

Naturalized in ponds about Bordentown, N. J., where it was introduced by Mr. E. D. Sturtevant. Native of India, Persia, China, Japan and Australia. A superb plant, often cultivated. July-

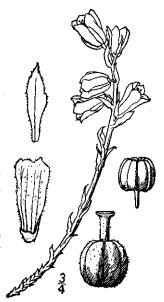
Monotropa hypopithys L.

Pine-sap. False Beech-Drops.

Nelumbo nucifera Gaertn. Fruct. & Sem. 1: 73. Hypopitys multiflora americana DC. Prodr. 7: 780. 1839. Hypopitys americana Small, Fl. SE. U. S. 880. 1903.

> Plants lemon-yellow, or sometimes pink, finely pubescent. Stems 4'-12' tall; scales crowded at base of the stem, 2"-6" long, the upper ones sometimes irregularly toothed; flowers several; sepals spatulate to oblanceolate, 32"-5" long, often irregularly toothed, ciliate with very short hairs; petals mainly cuneate, 9"-13" long, sparingly pubescent, and ciliate like the sepals; style sparingly pubescent; stigma not retrorsely bearded; capsule oval or oblong-oval, 3\frac{3}{2}"-5" long.

> In woods, Ontario and New York, and southward in or near the Alleghenies to North Carolina. Yellow-bird's-nest. Fir-rope. July-Aug.



Nemopanthus mucronàta (L.) Trelease. Wild or Mountain Holly.

Vaccinium mucronatum L. Sp. Pl. 350. 1753.

Nemopanthus fascicularis Raf. Journ. Phys. 89: 97. 1819.

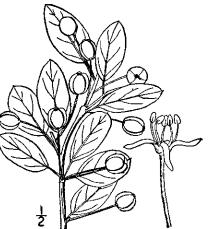
N. canadensis DC. Mem. Soc. Gen. 1: 450. 1821.

Nemopanthes mucronata Trelease, Trans. Acad. St. Louis 5: 349. 1889.

Ilicioides mucronata Britton, Mem. Torr. Club 5: 217.

A shrub, 6°-15° high, with ash-colored bark. Leaves elliptic or obovate, ½'-2' long, acutish or mucronate at the apex, obtuse or acute at the base, entire or with a few small teeth; petioles 3"-6" long; flowers of both kinds solitary, or the staminate sometimes 2-4 together; pedicels very slender, often 1½' long; drupe red, 3"-4" in diameter; nutlets faintly ribbed.

In swamps, Newfoundland to western Ontario, south to Wisconsin, Indiana and Virginia. Cat-berry. Bricktimber. May.



or, as here described, includes more than one species.

Large Yellow Pond Lily. Kelp.

Nuphar lutea ssp. advena (Ait.) Kartesz & Gandhi

Nymphaea advena Soland. in Ait. Hort. Kew. 2: 226.

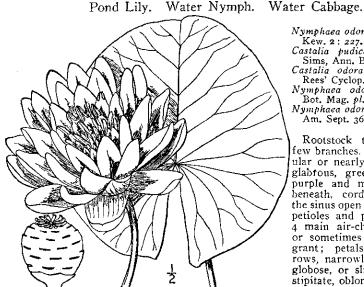
Nuphar advena R. Br. in Ait. Hort. Kew. Ed. 2, 3:

N. advena minor Morong, Bot, Gaz. II: 167, 1886. Floating and emersed leaves 5'-12' long, 5'-9' broad, ovate or orbicular-oval, thick, the sinus 2'-5' deep, generally open; submerged leaves, when present, thin-membranous, nearly orbicu-

lar, otherwise similar; petioles, peduncles and lower surfaces of the leaves often pubescent; flowers 12-32 in diameter, depressed-globose, yellow or tinged with purple; sepals 6, oblong, about 1½" long; petals fleshy, oblong, truncate, 4"-5" long; stamens in 5-7 rows; anthers about the length of the filaments; stigmatic disc undulate, yellow, or pale red, rays 12-24; fruit ovoid, not deeply constricted into a neck, 12'-2' long, about I' thick.

In ponds and slow streams, Labrador and Nova Scotia to the Rocky Mountains, south to Florida, Texas and Utah. April-Sept. Beaver-root. Bonnets. Cow-, frog-, dog-, horse- or beaver-lily. Spatter-dock. Apparently consists of several races,

Nymphaea odorata Ait. Sweet-scented White Water Lily.



Nymphaea odorata Dryand, in Ait. Hort, Kew. 2: 227. 1789.

Castalia pudica Salisb. in Konig. & Sims, Ann. Bot. 2: 72. 1805. Castalia odorata Woody. & Wood in Rees' Cyclop. 6: no. 1. 1806.

Nymphaea odorata var. minor Sims, Bot. Mag. pl. 1652. 1814.

Nymphaea odorata var. rosea Pursh, Fl. Am. Sept. 369. 1814.

Rootstock thick, simple or with few branches. Leaves floating, orbicular or nearly so, 4'-12' in diameter, glabfous, green and shining above, purple and more or less pubescent beneath, cordate-cleft or reniform, the sinus open but sometimes narrow; petioles and peduncles slender, with 4 main air-channels; flowers white, or sometimes pink, 3'-6' broad, fragrant; petals numerous, in many rows, narrowly oblong, obtuse; fruit globose, or slightly depressed; seeds stipitate, oblong, shorter than the aril.

In ponds and slow streams, Newfoundland to Manitoba, south to Florida, Louisiana and Kansas, Toad-lily. June-Sept.

Nymphaea tetragona Georgi

Nymphaea tetragona Georgi, Reise in Russ. Reichs, 1: 220. 1775. Castalia pygmaea Salish. Parad. Lond. pl.

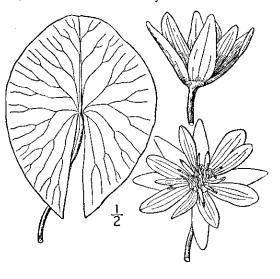
68. 1807. C. Leibergii Morong. Bot. Gaz. 13: 134.

Castalia tetragona Lawson, Trans. Roy. Soc. Canada 6: Sec. IV. 112. 1888.

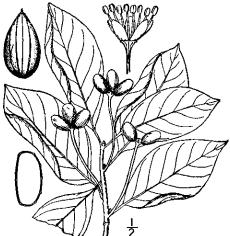
Leaves floating, oval or oblong, 2'-4' long, 1½'-3' wide, green above, green or purplish beneath, the basal lobes acute or rounded; sinus open, narrow; petioles and peduncles nearly or quite glabrous; flowers white, inodorous, I'-2' broad; petals in about 2 rows, faintly striped with purple, obtuse or acutish, oblong or obovate, thin, about the length of the sepals.

In the Misinaibi River, Ontario (R. Bell); in ponds along the Severn River, Keewatin (J. M. Macoun); near Granite Station, northern Idaho (Leiberg). Also in Siberia, Japan and the Himalayas. Summer.

Small White Water Lily.



Nyssa sylvática Marsh. Pepperidge. Sour Gum. Tupelo.



Nyssa sylvatica Marsh. Arb. Am. 97. 1785. Nyssa muttifiora Wang. Holz, 46. pl. 16. 1787.

A large tree, with rough bark, reaching a maximum height of 110° and trunk diameter of 5°; branches horizontal, especially when the tree is young. Leaves obovate or oval, acute, acuminate, or obtuse at the apex, usually narrowed at the base, entire, glabrous and shining above, more or less pubescent beneath, 2'-4' long; petioles 4"-7" long; staminate flowers in compound capitate clusters; pistillate flowers larger, 2-14 together; fruit ovoid, nearly black, 4"-7" long, acid; stone ovoid, more or less flattened and ridged.

In rich soil, most abundant in swamps, Maine and Ontario to Florida, Michigan, Missouri and Texas. Leaves crimson in autumn, rarely angulate-toothed on young trees. Wood soft, tough, Snag-tree. Beetle-bung. Hornbeam. Hornpipe. Hornbine. Hornpine. April-June.



Oenothera cespitosa Nutt.

Scapose Primrose.

Ocnothera caespitosa Nutt. Fras. Cat. 1813. Ocnothera scapigera Pursh, Fl. Am. Sept. 263. 1814. P. Nuttallii Spach, Hist. Veg. 4: 365. 1835. Pachylophus caespitosa Raimann in Engl. & Prantl, Nat. Pfl. Fam. 3: Abt. 7, 215. 1893.

Acaulescent or nearly so, perennial or biennial from a thick woody root. Leaves clustered at the base, narrowed into a slender petiole, lanceolate, oblanceolate or oval, acutish at the apex, densely pubescent, sinuate-dentate, often densely ciliate with white hairs, repand or pinnatifid, 3–8' long, usually less than 1' wide; flowers few, white or rose, 1½'-3' broad; petals obcordate; lobes of the calyx pubescent, narrowly lanceolate, reflexed-spreading, its tube 2'-7' long, dilated at the mouth, many times longer than the ovary; capsule sessile, ovoid, strongly tuberculate on each side, the angles ribbed; seeds densely and minutely tuberculate.

Plains, South Dakota to Nebraska, Colorado and Utah. June-July.

Oenothera biénnis L. Common Evening-Primrose. Night Willow-herb.

Oenothera biennis L. Sp. Pl. 346. 1753.

Erect, generally stout, biennial, simple and wand-like or branched, 1°-6° high, more or less hirsute-pubescent, rarely glabrate. Leaves lanceolate to ovate-lanceolate, acute or acuminate, narrowed and sessile at the base or the lowest petioled, repand-denticulate, 1'-6' long; flowers opening in the evening, 1'-2½' broad; calyx-tube slender, much longer than the ovary, the lobes linear, contiguous at the base, reflexed; capsules oblong, narrowed above, erect, pubescent, ½'-1½' long, 2½"-3" thick, nearly terete, longer than the deciduous upper bracts.

Usually in dry soil, Labrador to Florida, Minnesota, Arkansas and Texas. Large rampion. Tree-primrose. Four-o-clock. Coffee- or fever-plant. King's-cure-all. Scurvish or scabish. June-Oct.

Oenothera grandiflora Ait., of the Gulf States, is taller and has much larger flowers, up to 4' broad. Large-flowered races of the preceding species have been mistaken for it.



Oenothera parviflora L.

Small-flowered Evening-Primrose.

Oenothera cruciata Nutt.; G. Don, Gen. Hist. 2: 686.

Oenothera biennis var, cruciata T. & G. Fl. N. A. 1: 492. 1840.

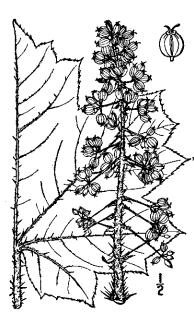
Onagra biennis cruciata Britton, Mem. Torr. Club 5: 233. 1894.

Onagra cruciata Small, Bull. Torr. Club 23: 169. 1896.

Annual, glabrate or sparingly villous. Stem erect, 2°-4° tall, usually simple, reddish or purple; leaves narrowly oblong or oblanceolate (the upper ones often lanceolate), 1½'-4' long, acute, serratedenticulate, the lower ones slender-petioled. the uppermost nearly sessile; flowers small, yellow; spikes 4'-12' long, leafy-bracted. calyx-tube slender, ¾'-1' long, sparingly villous; calyx-segments linear-lanceolate, shorter than the tube; petals linear, 3"-6" long, ½"-2" broad, acutish; capsules 1'-14' long, gradually narrowed from the base, villous; seeds prismatic-angled, 1" long.

Sandy soil, Maine to New York and Massachusetts. Ascends to 2000 ft, in the Adirondacks. Aug.-Oct.





Oplopanax horridus Miq.

Devil's Club.

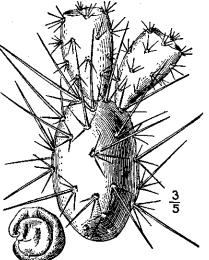
Panax horridum J. E. Smith, in Rees' Cyclop. 26: no. 10.

1819. E. horridum Decne, & Planch.; Cooper, Pac. R, R. Rep. 12: 31. 1860. Oplopanax horridum Miq. Ann. Mus. Bot. Lugd. Bat. 1: 116.

Optopanax norrigum Miq. Ann. Mus. Bot. Lugd. Bat. 1. 110. 1863.
Fatsia horrida B. & H.; S. Wats. Bot. Cal. 1: 273. 1876.

Stems erect from a decumbent base, up to 13° high, densely prickly, leafy above; leaves nearly orbicular in outline, 6'-2° broad, cordate at the base with a rather narrow sinus, 3-11-lobed, with scattered prickles on both sides and puberulent beneath, the lobes acute, sharply irregularly serrate; inflorescence wooly, terminal, 4'-12' long; peduncles subtended by a narrow laciniate bract; pedicels filiform; stamens about twice as long as the ovate petals; fruit 2"-2½" long, scarlet.

In rocky places, Isle Royale, Lake Superior; Montana to Oregon and Alaska; also in Japan. June.



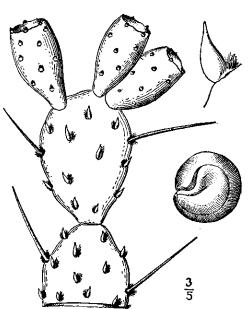
Opuntia frágilis (Nutt.) Haw. Brittle Opuntia. Tuna.

Cactus fragilis Nutt. Gen. 1: 296. 1818.

Opuntia fragilis Haw. Syn. Pl. Succ. Suppl. 82. 1819.

Decumbent or prostrate; joints ovoid, 1'-2' long, somewhat flattened or nearly terete. Leaves very small, reddish; cushions composed of few bristles; central spines 1-4, ½'-1½ long, gray, darker at the apex, surrounded by 4-6 smaller ones; flowers yellow, smaller than those of the preceding species; fruit nearly 1' long, becoming dry at maturity, provided with cushions of bristles usually bearing a few short spines.

Prairies and dry soil, Iowa, Wisconsin and Minnesota to South Dakota, British Columbia, Kansas and Utah. July-Sept.



Opuntia humifusa var. humifusa (Raf.) Raf..

Eastern Prickly Pear. Indian Fig.

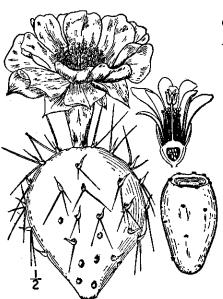
Cacius Opuntia L. Sp. Pl. 468. 1753.

O. vulgaris Mill. Gard. Dict. Ed. 8, no. 1, 1768.

O. Opuntia Coult. Contr. Nat. Herb. 3: 432. 1896.

Prostrate, or ascending, joints obovate, oval or orbicular, 2'-5' long. Leaves subulate, appressed or somewhat spreading, 2"-4" long, usually early deciduous; bristles greenish or yellowish brown; spines, when present, solitary, grayish or variegated, stout, not deflexed, 3"-1½" long, often wanting; flowers yellow, sometimes with a reddish center, 2"-3" broad; petals 8-10; fruit obovoid, fleshy, edible, 1'-1½' long, red.

In dry sandy soil, or on rocks, eastern Massachusetts to eastern Pennsylvania, Kentucky and northern Florida. June-Aug. Pricklypear cactus. Devil's-tongue. Barberry.



Opuntia humifùsa Raf.

Western Prickly Pear. Devil's Tongue.

Cactus humifusus Raf. Ann. Nat. 15. 1820. Opuntia humifusa Raf. Med. Bot. 2: 247. 1830. O. mesacantha Raf.; Ser. Bull. Bot. Gen. 216. 1830. O. Rafinesquii Engelm. Pac. R. R. Rep. 4: 41 1856.

Prostrate, similar to the preceding species; joints obovate to suborbicular, or oval, usually deep green, 2'-5' long; leaves subulate, spreading, 3"-5" long; bristles reddish brown; spines few, mostly near the margins of the joints, 1-4 together, whitish, or reddish at base and apex, deflexed, or the longer one spreading and ½'-1' long; flowers yellow, often with a reddish centre, 2½'-3½' broad; petals 10-12; fruit club-shaped, not spiny, fleshy, edible, 1½'-2' long.

In dry sandy or rocky soil, Ohio to Minnesota, Kentucky, Missouri, Nebraska and Texas. Summer,

Opuntia macrorhiza Engelm., a related species with a deep woody root, abundant in Texas, is reported to range northward into Missouri and Kansas.

Opuntia polyacántha Haw. Many-spined Opuntia. Tuna.

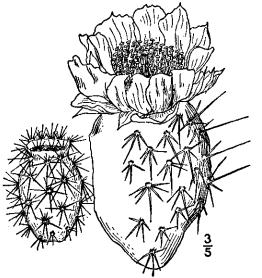
Cactus ferox Nutt. Gen. 1: 296. 1818. Not Willd. 1813.

Opuntia polyacantha Haw. Syn. Pl. Succ. Suppl. 82, 1819.

Opuntia missouriensis DC. Prodr. 3: 472. 1828.

Prostrate, joints broadly obovate to orbicular, tubercled, pale green, 2'-6' long, about 6" thick the tubercles 2" high, densely spiny and with cushions of fine bristles; spines 5-12, slender, 6"-2' long, whitish; leaves minute; flowers light yellow, 2'-3' broad; fruit dry, very prickly, 1'-1½' long.

Plains and dry soil, Wisconsin to South Dakota, Athabasca, British Columbia, Nebraska, Missouri, Utah and New Mexico. May-June.



Osmorhiza claytonii (Michx.) C.B. Clarke Woolly or Hairy Sweet-Cicely. Sweet Javril.



Myrrhis Claytoni Michx. Fl. Bor. Am. 1: 170. 1803. Osmorrhisa brevistylis DC, Prodr. 4: 232. 1830. O. Claytoni Clarke in Hook, f. Fl. Brit. Ind. 2: 690. 1879. W. Claytoni Britton in Britt. & Brown, Ill. Fl. 2: 530. 1897.

Erect, at length widely branched above, 1½°-3° high, villous-pubescent throughout, especially when young. Lower leaves long-petioled, large, sometimes 1° wide, ternately decompound, the segments ovate or oval, incised-dentate; upper leaves nearly sessile, less compound; umbels long-peduncled, 2-6-rayed; rays divaricate, 1'-2' long in fruit; involucels of several subulate bracts; pedicels 3"-8" long; fruit about 6" long, about 1" wide; style and stylopodium ½" long, the stylopodium slender-conic.

In woods, Nova Scotia to South Dakota, North Carolina, Alabama, Illinois, Nebraska and Kansas. Ascends to 4000 ft. in Virginia. May-June.



Osmorhiza longistylis (Torr.) DC. Smoother Sweet-Cicely. Anise-root.

Myrrhis longistylis Torr. Fl U. S. 310. 1824.
Osmorrhiza longistylis DC. Prodr 4: 232. 1830.
W. longistylis Britton in Britt. & Brown, Ill. Fl. 2: 530.
1897.

Similar to the preceding species but the leaflets usually less deeply cleft, the stem either glabrous or densely villous; styles in fruit about I' long; bracts of the involucels lanceolate, 3"-4" long, persistent.

In woods, Nova Scotia to Ontario, Assiniboia, Alabama, Tennessee, Kansas and Colorado. Ascends to 4200 ft. in North Carolina. Roots with a more spicy taste and stronger odor of anise than those of W. Claytoni. Plants with stems either glabrous or densely white villous are sometimes found growing together. May-June. Sweet-anise, -chevril or -javril. Cicely-root.

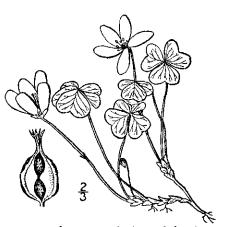
Oxalis Acetosélla L. White or True Wood-sorrel. Alleluia.

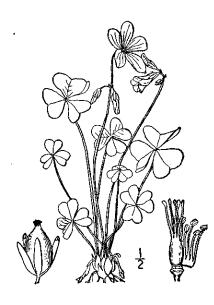
Oxalis Acetosella L. Sp. Pl. 433. 1753.

Perennial by a scaly nearly unbranched rootstock, acaulescent, 2'-6' high, pubcscent with scattered brownish hairs. Leaves 3-6, long-petioled; petioles jointed and dilated at the base; leaflets obcordate, wider than long; scapes 1-3, slightly longer than the leaves, 1-flowered, 2-bracted above the middle; flowers broadly campanulate, about ½' long; sepals obtusish; petals white or pink, veined with deep pink, emarginate or entire, 3-4 times as long as the calyx; capsule subglobose, 1"-2" long, glabrous, its cavities 1-2-seeded; seeds ovoid, longitudinally grooved.

In cold damp woods, Nova Scotia to Saskatchewan, the mountains of North Carolina, and the north

shore of Lake Superior. Cleistogene flowers are borne on recurved scapes at the base of the plant. Native also in Europe, Asia and northern Africa. Sleeping beauty. Ladies'- or sleeping clover. Sheep-sorrel. Cuckoo-flower. Old names, wood-sower or wood-sour, cuckoo's meat, sour trefoil, stub-wort, shamrock, hearts, sour-trifoly. Yields the druggists' "Salt of Lemons." May-July.





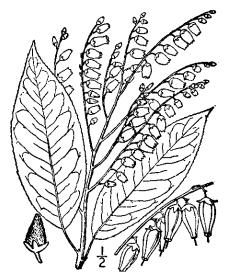
Oxalis violacea L.

Violet Wood-sorrel.

Oxalis violacea L. Sp. Pl. 434. 1753. Ionoxalis violacea Small, Fl. SE. U. S. 665, 1903.

Perennial from a brownish bulb with ciliate scales, acaulescent, 4'-9' high, nearly or quite glabrous. Leaves generally 4-8, long and slender-petioled, about 1' wide; leaflets obcordate, minutely reticulated, the midrib sometimes sparingly hairy; scapes several, commonly exceeding the leaves, umbell tely 3-12-flowered; pedicels slender; flowers 8"-10" long, heterogonous; sepals obtuse; petals rose-purple, rarely white, lighter toward the base, obtuse or truncate, 3 times as long as the sepals; capsule ovoid, 2" in diameter; cavities 2-3-seeded; seeds flattened, rugose-tuberculate.

In woods, Massachusetts to Minnesota and South Dakota, south to Florida and Texas. Purple wood-sorrel. Sheep-sorrel. May-June.



Oxydendrum arbòreum (L.) DC. Sourwood. Sorrel-tree.

Andromeda arborea L. Sp. Pl. 394. 1753. Oxydendrum arboreum DC. Prodr. 7: 601. 1839.

A smooth-barked tree, reaching a maximum height of about 60° and a trunk diameter of 15′. Leaves oblong, oval or oval-lanceolate, sharply serrulate, or entire, green and glabrous on both sides, finely reticulate-veined, acuminate at the apex, mostly narrowed at the base, 4′-6′ long, 1′-3′ wide; racemes numerous, long and slender, erect or curving, panicled at the ends of the branches, the rachis and short pedicels canescent; flowers 3½″-3′ long; capsule 2″-3″ long, canescent, tipped by the persistent style, the pedicels curving.

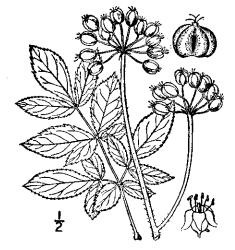
In woods, Pennsylvania and Maryland to Indiana, Alabama and Florida. Wood hard, reddish-brown; weight per cubic foot 46 lbs. Elk-tree. June-July.

Aralia híspida Vent. Bristly Sarsaparilla. Wild Elder.

Aralia hispida Vent. Hort. Cels, pl. 41. 1800.

Erect, leafy, 1°-3° high, the stem and petioles hispid with slender bristles. Leaves bipinnate; leaflets ovate or oval, acute, glabrous or pubescent on the veins beneath, sharply serrate, 1'-2' long; umbels several, slender-peduncled, simple; pedicels glabrous; flowers white, 1" broad; fruit dark purple, 3"-4" in diameter, strongly 5-lobed when dry.

In rocky or sandy woods, and clearings, Newfoundland to North Carolina, Hudson Bay, Minnesota, Indiana and Michigan. June-July. Rough sarsaparilla. Dwarf elder. Hyeble. Pigeon-berry.





Panax quinquefòlium L. Ginseng. Red-berry. Sang.

Panax quinquefolium L. Sp. Pl. 1058. 1753. Ginseng quinquefolium Wood, Bot. & Flor. 142. 1873.

Glabrous, 8'-15' high. Root fusiform, deep. Petioles 1½'-4' long; leaflets 5 (rarely 6-7), stalked, thin, ovate or obovate, acuminate, 2'-5' long, 1'-2' wide, irregularly dentate; peduncle slender, 1'-2' long; umbel 6-20-flowered; pedicels 3"-6" long in fruit; flowers about 1" broad; styles usually 2; fruit somewhat didymous, bright crimson, 5" broad.

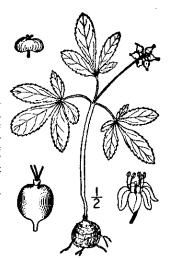
In rich woods, Quebec to Alabama, Ontario, Minnesota, Nebraska and Missouri. July-Aug. The plant has become rare in most parts of its range by the gathering of its roots for export to China, but is now extensively cultivated in artificial shade.

Panax trifòlium L. Dwarf Ginseng or Groundnut.

Panax trifolium L. Sp. Pl. 1059. 1753. Ginseng trifolium Wood, Bot. & Flor. 142. 1873.

Glabrous, 3'-8' high. Root globose, deep, about ½' in diameter, pungent to the taste; petioles ½-2' long; leaflets 3-5, oval to oblanceolate, sessile, obtuse, usually narrowed at the base, 1'-1½' long, 3"-8" wide, dentate or serrate; peduncles 1'-2½' long; pedicels 1"-1½" long in fruit; flowers white, often monoecious, about 1" broad; styles usually 3; fruit mostly 3-angled (or when with 2 styles, didymous), yellow, about 2" broad 2" broad.

In moist woods and thickets, Nova Scotia to Georgia, west to Ontario, Wisconsin and Iowa. April-June.





Papaver Rhoèas L. Field, Red or Corn Poppy. African Rose.

Papaver Rhoeas L. Sp. Pl. 507. 1753.

Erect, branching, 1°-3° high, hispid with spreading bristly hairs. Lower leaves petioled, 4'-6' long, the upper smaller, sessile, all pinnatifid; lobes lanceolate, acute, serrate; flowers 2'-4' broad, scarlet with a darker center; filaments not dilated; capsule subglobose or top-shaped, glabrous, the disk with 10 or more stigmatic rays.

In waste places and on ballast, Maine to Connecticut and Virginia. Vancouver Island. Bermuda. Occasionally cultivated. Fugitive from Europe. Summer. Old English names. Corn-rose. Red-weed, Headache, Canker-rose and Cheesebowl. Thunder-flower. Blue-eyes.

Papaver somniferum L. Opium or Garden Poppy. Marble-flower.

Papaver somniferum L. Sp. Pl. 508. 1753.

Erect, sparingly branched, glaucous, 1°-3° high. Leaves clasping by a cordate base, 4'-8' long, 2'-3' wide, oblong, wavy, lobed or toothed; flowers 3'-4' broad, bluish-white with a purple center; filaments somewhat dilated upward; capsule globose, glabrous.

Occasional in waste grounds and on ballast. Also in Bermuda. Fugitive from Europe. Often cultivated for ornament. Widely cultivated in Europe and Asia for its capsules, from which the drug opium, and poppy-oil are derived. Native of the Mediterranean region. Summer. Mawseed. Joan silver-pin. Cheesebowl. Balewort.



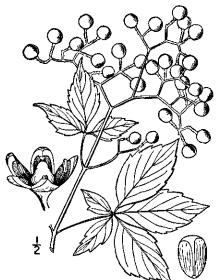
Parthenocissus quinquefòlia (L.) Planch. Virginia Creeper. False Grape. American Ivv.

Hedera quinquefolia L. Sp. Pl. 202. 1753. Vitis quinquefolia Lam. Tabl. Encycl. 2: 135. 1793. Ampelopsis quinquefolia Michx. Fl. Bor. Am. 1: 160.

Parthenocissus quinquefolia Planch. in DC. Mon. Phan. 5: Part 2, 448. 1887. P. vitacea A. S. Hitchc. Spring Fl. Manhattan 26.

High-climbing or trailing, glabrous or pubescent. Tendrils usually numerous, and often provided with terminal adhering expansions, the vine sometimes supported also by aerial roots; leaves petioled, digitately 5-foliolate (rarely 7-foliolate); leaflets stalked, oval, elliptic, or oblong-lanceolate; 2'-6' long, acute or acuminate, narrowed at the base, coarsely toothed, at least above the middle, pale beneath, dark green above, glabrous or somewhat pubescent; panicles ample, erect or spreading in fruit; berries blue, about 6" in diameter, usually 2-3-seeded; peduncles and pedicels red.

In woods and thickets, Quebec to Assiniboia, Missouri, Florida, Texas and Mexico. Bahamas; Cuba. July. Fruit ripe in October. The foliage turns deep red in autumn. The species consists of numerous races, differing in pubescence, serration of leaflets and in the tendrils. Five-finger-ivy or -creeper. Fiveleaf-ivy. Erroneously called woodbine.



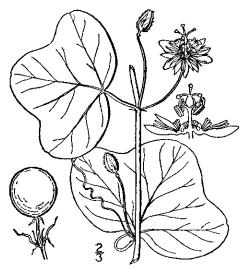
Passiflora incarnàta L. Passion-flower. Passion-vine.

Passiflora incarnata L. Sp. Pl. 959. 1753.

Stem glabrous, or slightly pubescent above, striate when dry, climbing to a height of 10°-30°. Petioles $\frac{1}{2}$ '-2' long, with 2 glands near the summit; leaves nearly orbicular in outline, glabrous, or often somewhat pubescent, 3'-5' broad, somewhat cordate at the base, deeply 3-lobed (rarely 5-lobed), the lobes ovate or oval, acute or acutish, finely serrate; flowers solitary, axillary, white with a purple or pink corona, $1\frac{1}{2}$ '-2' broad; peduncles longer than the petioles, usually 3-bracted just below the flowers; calyx-lobes linear, cuspidate on the back; berry ovoid, nearly 2' long, glabrous, yellow.

In dry soil, Virginia to Missouri, south to Florida and Texas. Fruit edible, called maypops. May-July.





Passiflora lùtea L. Yellow Passion-flower.

Passiflora lutea L. Sp. Pl. 958. 1753.

Glabrous or very nearly so throughout, herbaceous, climbing or trailing, 3°-10° long. Petioles ½'-1½' long; leaves much broader than long, more or less cordate at base, with 3 wide obtuse rounded lobes, the lobes entire, often mucronulate; stipules 1"-1½" long; peduncles slender, exceeding the petioles, usually in pairs from the upper axils; flowers greenish yellow, 6"-10" broad; calyx-lobes linear; berry globose-ovoid, 5"-6" in diameter, glabrous, deep purple.

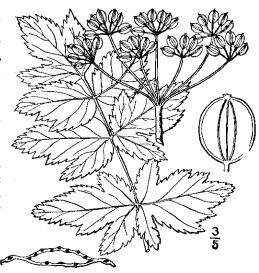
In thickets, Pennsylvania to Illinois, Missouri, Kansas, Florida and Texas. May-July.

Pastinaca sativa L. Wild Parsnip. Madnep. Tank.

Pastinaca sativa L. Sp. Pl. 262, 1753. Peucedanum sativum S. Wats. Bot. King's Exp. 128, 1871,

Biennial or rarely annual, glabrous, or somewhat downy-pubescent, 2°-5° high, the root long, conic, fleshy, the stem grooved. Lower and basal leaves petioled, pinnate, often 1½° long, the segments rather thin, ovate or oval, obtuse, sessile, lobed or incised and sharply dentate, 1'-3' long; upper leaves generally much reduced; umbels several or numerous, 2'-6' broad, 7-15-rayed, the rays slender, ½'-2' long; pedicels very slender, 3"-6" long in fruit; fruit broadly oval, 2½"-3½" long, 2"-3" broad, the dorsal and intermediate ribs not prominent but the oil-tubes conspicuous.

Roadsides and waste places, a very common weed in nearly all parts of our area. Naturalized from Europe. June-Sept. Queen-weed. Bird's-nest. Hart's-eye.

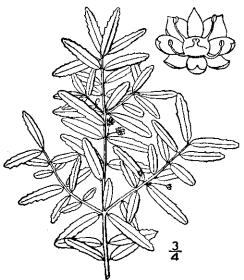


Paxistima canbyi Gray Canby's Mountain Lover.

P. Canbyi A. Gray, Proc. Amer. Acad. 8: 623. 1873.

A shrub 4'-12' high, with decumbent rooting branches. Leaves linear-oblong, or slightly obovate, 3"-12" long, 1½"-2" wide, obtuse at each end, very short-petioled, pale green, serrate, the margins revolute; peduncles 1-3-flowered, 2-bracted below the middle; pedicels slender, shorter than the leaves, 2-bracted near the base; calyx-lobes oval, about equalling the petals; capsule oblong, about 4" long and 2" in diameter, dehiscent at maturity.

On dry exposed rocks, mountains of Virginia and West Virginia, Rat-stripper. April-May,

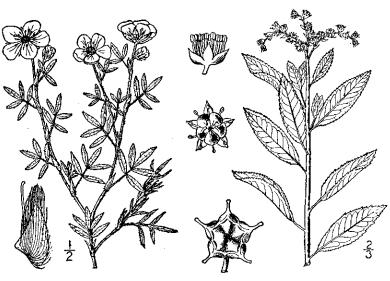


Pentaphylloides floribunda (Pursh) A. Love Shrubby Cinquefoil.

Potentilla fruticosa L. Sp. Pl. 495. 1753. Dasiphora riporia Raf. Aut. Bot. 167. 1838. Dasiphora fruticosa Rydb. Mem. Dep. Bot. Col. Univ. 2: 188. 1898.

Shrubby, much branched, stems erect or ascending, very leafy, 6'-4° high, the bark shreddy. Stipules ovate-lanceolate, membranous, acute or acuminate, entire; leaflets 5-7, oblong, linear-oblong, or somewhat oblanceolate, entire, acute or acutish at each end, 6''-12'' long, silky-pubescent, the margins revolute; flowers terminal, densely cymose, or solitary, bright yellow, 8''-15'' broad; petals nearly orbicular, exceeding the ovate calyx-lobes and bractlets; stamens 15-20; style lateral, filiform; achenes, disk and receptacle long-hairy.

In swamps or moist rocky places, Labrador and Greenland to Alaska, south to New Jersey, Illinois, Minnesota, in the Rocky Mountains to Arizona, and in the Sierra Nevada to California. Also in northern Europe and Asia. Called also hardhack and prairie weed. A troublesome bushy weed in northern New England. June-Sept.



Penthorum sedoides L. Ditch or Virginia Stonecrop.

Penthorum sedoides L. Sp. Pl. 432. 1753.

Glabrous, erect, stem usually branched and angled above, terete below, 6'-2° high. Leaves lanceolate or narrowly elliptic, acuminate at each end, finely serrate, 2'-4' long, 6"-12" wide; cymes 2-3-forked, the branches 1'-3' long; flowers short-pedicelled, about 2" broad; sepals triangular-ovate, acute, shorter than the flattish capsule; petals linear or linear-spatulate, often or generally wanting.

In ditches and swamps, New Brunswick to Florida, west to Minnesota, Nebraska, Kansas and Texas. July-Sept.

Persea Borbònia (L.) Spreng. Red or Sweet Bay. Isabella-wood.

Laurus Borbonia L. Sp. Pl. 370. 1753. Persea Borbonia Spreng. Syst. 2: 268. 1825. Persea carolinensis Nees, Syst. 150. 1836. Notaphoebe Borbonia Pax in Engler & Prantl, Nat. Pfif. 3: Abt. 2, 116. 1889.

A tree, with dark red bark, reaching a maximum height of about 65° and a trunk diameter of 3°. Twigs puberulent or nearly glabrous. Leaves lanceolate, oblong or oblong-lanceolate, bright green above, paler beneath, glabrous when mature, 2'-7' long, 1'-2' wide, obscurely pinnately veined, acute, acuminate or some of them obtuse at the apex, narrowed at the base; petioles ½'-1' long; peduncles short, axillary, often little longer than the petioles, bearing few-flowered panicles; calyx puberulent, spreading in fruit, its inner segments longer than the outer; berries dark blue, ½' in diameter or more, their pedicels thick, red.

Along streams and borders of swamps, Delaware to Florida and Texas, near the coast, north to Arkansas. Wood hard, strong; color bright red; weight per cubic foot, 40 lbs. April-June. Fruit ripe Aug.-Sept, False mahogany. Bay-galls. White bay. Tisswood.

Foot, 40 lbs. April–June. Fruit ripe Aug.

Petroselinum crispum (P. Mill.) Nyman ex A.W. Hill

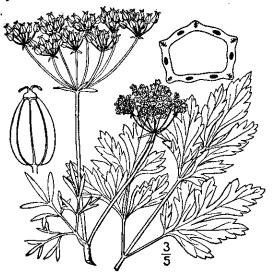
Common or Garden Parsley. Ache.

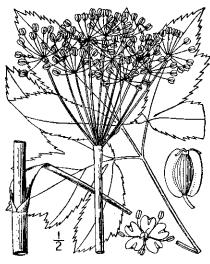
Apium Petroselinum L. Sp. Pl. 264. 1753. Petroselinum hortense Hoffm. Gen. Umb. 163. 1814. Petroselinum sativum Hoffm. Gen. Umb. 177. 1814.

Petroselinum Petroselinum Karst, Deutsch. Fl. 831. 1882.

Erect, usually biennial, 1°-3° high, much branched, glabrous. Leaves bipinnate, triangular in outline, the segments ovate, dentate, or incised, or those of the upper leaves linear-oblong and entire; umbels peduncled, 1'-2½' broad, axillary and terminal, 15-20-rayed; rays 5"-12" long; pedicels about 1½" long; involucre of 2-4 linear bracts; bractlets of the involucels subulate; flowers greenish yellow; fruit ovate, glabrous, about 2" long, the ribs rather prominent when dry.

Maryland to Ontario, escaped from cultivation. Introduced from Europe. Native of the Mediterranean region. Leaves of some cultivated races crisped. Summer.





Peucedanum ostruthium (L.) W.D.J. Koch

Masterwort. Pellitory of Spain.

Imperatoria Ostruthium L. Sp. Pl. 259. 1753.

Glabrous, or sparingly pubescent; stem stout, hollow, erect, 2°-5° tall. Leaves ternately divided into very broad stalked ovate to obovate segments, which are often 3-parted nearly or quite to the base, sharply and unequally serrate and often incised, the segments of the long-petioled lower leaves often 5′ broad; rays of the umbels and pedicels very numerous, slender; involucere none, or of 1 or 2 lanceolate bracts; involucel-bracts few, narrow, deciduous; fruit broadly oval, about 2″ long.

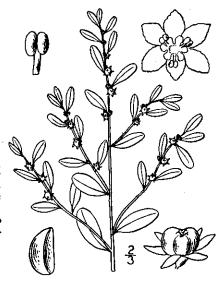
In fields, Pocono plateau of Pennsylvania, and Michigan. Reported from Newfoundland. Naturalized or adventive from Europe. Broad-leaved hog's-fennel. Felon-grass. Imperial masterwort, Felonwort. May-July.

Phyllanthus carolinénsis Walt. Carolina Phyllanthus.

Phyllanthus carolinensis Walt, Fl. Car. 228. 1788. Phyllanthus obovatus Willd. Sp. Pl. 4: 574. 1805.

Annual, dark green, glabrous. Stem slender, erect, or ascending, 4'-20' high, simple or branched, the branches 2-ranked; leaves obovate, or oblong, 3"-10" long, obtuse, narrowed to a very short petiole, or subsessile; flowers inconspicuous, nearly sessile in the axils; calyx 6-parted, its lobes linear, or oblong; stamens 3; styles 3, each 2-cleft; glands of the pistillate flower more or less united; capsule about 1" in diameter; seeds nearly 3" long, marked with lines and minute black papillae.

In sandy or gravelly soil, eastern Pennsylvania to Illinois, Kansas, Florida, Texas and Central America. May-Oct.



Physaria brassicoides Rydb.

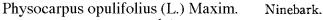
Double Bladder-pod.

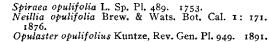
Vesicaria didymocarpa Hook, Fl. Bor, Am. 1: 49. pl. 16. 1830.

Physaria didymocarpa A. Gray, Gen. Ill. 1: 162, 1848. Physaria brassicoides Rydb. Bull. Torr. Club 29: 237.

Densely stellate-canescent, pale green; root long and deep. Stems decumbent or ascending, slender, simple, 3'–12' long; leaves spatulate, the basal ones obtuse, entire, or few-lobed, narrowed into margined petioles, 1'–5' long; stem-leaves nearly sessile, acute or subacute, much smaller; racemes 2'–5' long in fruit; flowers 5"–6" broad; pods didymous, variable, often 6" thick through the strongly inflated cavities, emarginate at base and summit or narrowed at base, commonly broader than high; seeds numerous.

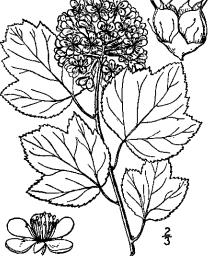
In dry soil, North Dakota to Saskatchewan, British Columbia, Nebraska, Colorado and Nevada. May-Aug.





A shrub 3°-10° high, with recurved branches, glabrous twigs and foliage, the bark peeling off in thin strips. Stipules caducous; leaves petioled, ovate-orbicular, obtusely or acutely 3-lobed, cordate, truncate or broadly cuneate at the base, I'-2' long, or larger on the young shoots, the lobes irregularly crenate-dentate; corymbs terminal, peduncled, nearly spherical, many-flowered, I'-2' broad; pedicels slender, glabrous or slightly pubescent, 5"-8" long; flowers white or purplish; calyx glabrous or somewhat pubescent; follicles 3-5, glabrous, shining, 3"-5" long, obliquely subulate-tipped, twice as long as the calyx.

River-banks and in rocky places, Quebec to Georgia, Tennessee and Michigan. June.



Phytolacca americàna L. Poke. Scoke. Pigeon-berry. Garget.



Phytolacca americana L. Sp. Pl. 41. 1753. Phytolacca decandra L. Sp. Pl. Ed. 2, 631. 1762.

A glabrous strong-smelling succulent erect branching herb, 4°-12° tall, the root perennial, large, poisonous, the stem stout, its pith divided into disks separated by lens-shaped cavities. Leaves oblong-lanceolate or ovate-lanceolate, pinnately veined, acute or acuminate at both ends, 8'-12' long; petioles ½'-4' long; racemes peduncled, 2'-8' long; pedicels divergent, 2"-6" long, each with a subulate-lanceolate bractlet at its base and usually 2 similar ones above; flowers perfect; calyx white, 2"-3" broad, its sepals suborbicular, or oval; stamens 10, slightly shorter than the sepals; ovary green, 10-celled; styles recurved; berry dark purple, 5"-6" in diameter, 3"-4" high, its 10 carpels conspicuous when dry.

In various situations, Maine and Ontario to Minnesota, Arkansas, Florida and Mexico. Bermuda. Sometimes a troublesome weed. Naturalized in Europe. Young shoots eaten like asparagus. June-Sept. Berries ripe Aug.—Oct. Inkberry. Redweed. Red-ink plant. Pocan-bush. Coakum. Cancer-jalap. American nightshade. Pokeweed.

Pimpinella Saxífraga L. Bennet. Pimpernel. Burnet Saxifrage.

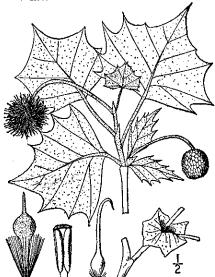
Pimpinella Saxifraga L. Sp. Pl. 263. 1753.

Erect, glabrous, 1°-2° high, somewhat branched. Leaves pinnate; segments of the lower 9-19, sharply serrate, or incised, ovate, or nearly orbicular, 8"-12" long; upper leaves shorter-petioled and of fewer segments cut into narrower lobes; flowers white; umbels slender-peduncled, 7-20-rayed; rays slender, 1'-1½' long in fruit; fruit oval, about 1" long.

In waste places, New Brunswick to Pennsylvania, New Jersey, Delaware and Ohio. Adventive from Europe. June-Oct.



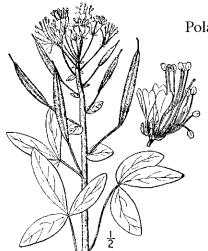
Platanus occidentàlis L. Button-wood. Button-ball. Plane-tree.



Platanus occidentalis L. Sp. Pl. 999. 1753.

A large tree; maximum height about 130° and trunk diameter 14°; outer bark freely peeling off in thin plates, uncovering the bright white inner layers. Leaves orbicular, or wider than long, 4′-9′ wide when mature, cordate or truncate at the base, 3-5-lobed, densely floccose-pubescent with whitish branched hairs when young, less so above and becoming nearly glabrous when old, the lobes mostly large, sharply serrate, or rarely entire; petiole mostly shorter than the blade; stipules with broad spreading toothed borders, conspicuous on young shoots; fruiting heads 1′ in diameter, usually solitary, hanging on a long peduncle, persistent through the winter, the nutlets at length scattered by the wind.

Along streams and in wet woods, Maine to Ontario and Minnesota, Florida, Kansas and Texas. Wood hard, weak, difficult to split, reddish brown; weight per cubic foot 35 lbs. The largest tree of east America; often called sycamore. The outer bark of the lower part of old trunks does not freely exfoliate. False sycamore. Water-beech. May.



Polanisia dodecandra ssp. trachysperma (Torr. & Gray) Iltis

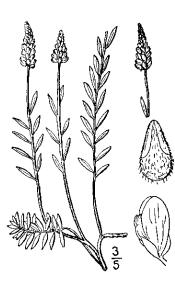
Large-flowered Clammy-weed.

Polanisia trachysperma T. & G. Fl. N. A. 1: 669. 1840.

Jacksonia trachysperma Greene, Pittonia 2: 175. 1891.

Similar to the last, but flowers twice the size (4"-6" long); style slender, 2"-3" long; stamens much exserted, often twice the length of the petals; filaments purple, conspicuous; pod slightly larger, nearly or quite sessile.

Prairies and plains, Iowa to Missouri, Texas, west to British Columbia and California. Summer.



Polygala álba Nutt. White Milkwort.

Polygala alba Nutt. Gen. 2: 87. 1818.

Polygala Scnega var. tenuifolia Pursh. Fl. Am. Sept. 750. 1814. Not P. tenuifolia Willd. 1803.

Perennial, glabrous, stems creet from hard woody rootstocks, slender, 6'-15' high. Leaves alternate, narrowly linear, acute, 3"-12" long, ½"-1" wide, their margins entire and revolute, the lower somewhat broader and shorter, clustered; spike terminal, long-peduncled, dense, 1'-2' long; flowers 1"-1½" long, white; pedicels less than ½" long; wings oblong-ovate, slightly concave; crest of the corolla short; seeds silky; about twice the length of the caruncle-lobes.

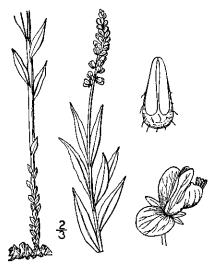
Prairies, South Dakota to Nebraska, Kansas, Texas and Mexico, Montana, New Mexico and Arizona. May-July.

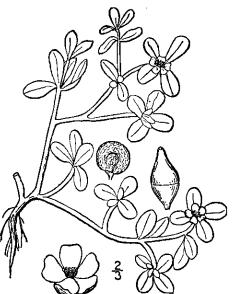
Polygala Sénega L. Seneca Snakeroot. Mountain Flax.

Polygala Senega L. Sp. Pl. 704. 1753. Polygala Senega latifolia T. & G. Fl. N. A. 1: 131. 1838.

Perennial, glabrous or nearly so, stems several, from woody rootstocks, erect or ascending, 6'-18' high, simple, or branched above. Leaves alternate, lanceolate to ovate or oblong-lanceolate, sessile, I'-2' long, 3"-4" wide, serrulate, the lowest much smaller and scale-like; spike terminal, short-peduncled, dense, acute, I'-2' long; flowers I½" long, white or tinged with green; pedicels less than ½" long; wings orbicular-obovate, concave; crest of the corolla short, few-lobed; seed hairy, slightly longer than the lobes of the carnincle.

In rocky woods, New Brunswick to Hudson Bay, Alberta, south to North Carolina along the Alleghanies and to Missouri and Arkansas, Rattlesnake snake-root. Senega-root. May-June.





Portulaca oleràcea L. Purslane. Pussley.

Portulaca oleracea L. Sp. Pl. 445. 1753.

Annual, prostrate, freely branching from a deep central root, branches 4'-10' long. Leaves alternate and clustered at the ends of the branches, obovate or cuneate, 3"-10" long, rounded at the apex, very fleshy; flowerbuds flat; flowers solitary and sessile, 2"-3" broad, yellow, opening in bright sunshine for a few hours in the morning; sepals broad, keeled, acutish; style 4-6-parted; capsule 3"-5" long; seeds finely rugose, about 1" long.

In fields and waste places, nearly throughout our area, and in warm and tropical America. Native in the southwest, but naturalized northward. Widely naturalized as a weed in the warmer parts of the Old World. Summer.

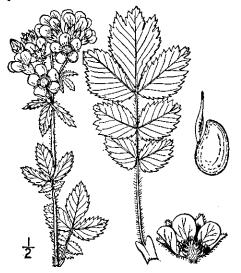
Potentilla arguta ssp. arguta Pursh

Tall or Glandular Cinquefoil.

Geum agrimonioides Pursh. Fl. Am. Sept. 351.
1814.
Potentilla arguta Pursh, Fl. Am. Sept. 736. 1814.
Drymocallis agrimonioides Rydb. N. A. Fl. 22:
368. 1908.

Erect, stout, simple or little-branched above, glandular and villous-pubescent, 1°-4° high. Stipules membranous; basal leaves slender-petioled, pinnately 7-11-foliolate; leaflets ovate, oval or rhomboid, obtuse at the apex, the terminal one cuneate, the others rounded at the base and commonly oblique, all sharply incised-dentate; stem-leaves short-petioled or sessile, with fewer leaflets; flowers white, densely cymose, terminal, numerous, short-pedicelled, 5"-7" broad; calyx-lobes ovate, acute, shorter than the obovate petals; stamens 25-30, borne on the glandular disk; style nearly basal and fusiform-thickened; achenes glabrous.

On dry or rocky hills, New Brunswick to Mackenzie, south to Virginia, Illinois, Kansas and Colorado. June-July.



Potentilla canadénsis L. Five-finger, Common Cinquefoil.

Potentilla canadensis L. Sp. Pl. 498. 1753.

Spreading by slender runners 3'-2° long, the pubescence of the stem, petioles and peduncles spreading. Stipules lanceolate, acute, entire or few-toothed; leaves petioled, digitately 5-foliolate (rarely 3-4-foliolate); leaflets oblanceolate, obovate or oblong, obtuse at the apex, narrowed at the base, 6"-1' long, serrate; peduncles slender, axillary, 1-flowered, the first from the axil of the second stemleaf; flower yellow, 3"-7" broad; petals 5, broadly oval, slightly longer than the acute calyx-lobes and linear-lanceolate bractlets; stamens about 20; style filiform; achenes glabrous; receptacle villous.

In dry soil, New Brunswick to Georgia, Minnesota and Texas. Ascends to 6300 ft. in North Carolina. April-Aug. Wild or barren strawberry. Sinkfield. Running buttercups. Star-flower.

Potentilla caroliniana Poir., a plant of the Southern States, with longer spreading pubescence, and broadly obovate leastess which are cuneate at the base, enters our area in southern Virginia and Missouri. It is probably a race of P. canadensis L.

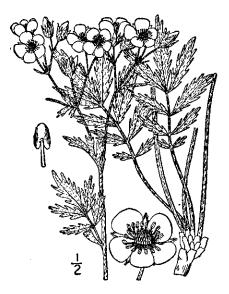


Potentilla Hippiàna Lehm. Woolly Cinquefoil.

P. Hippiana Lehm. Nov. Stirp. Pug. 2: 7. 1830.
Potentilla leucophylla Torr. Ann. N. Y. Lyc. 2: 197.
1825. Not Pall. 1773.

Erect or ascending, perennial, branched above, rather stout, 1°-2½° high, densely floccose as well as silky. Stipules lanceolate, acuminate, entire; lower and hasal leaves petioled, pinnately 5-11-foliolate; leaflets oblanceolate or oblong, obtuse, narrowed or cuneate at the base, 6"-18" long, incisely dentate, very white beneath, the lower ones smaller than the upper, and no smaller ones interspersed; flowers terminal, yellow, loosely cymose, 3"-6" broad; petals obovate, retuse, a little exceeding the lanceolate acute calyx-lobes and slightly narrower bractlets; stamens about 20; style filiform; achenes glabrous.

Dry soil, northwestern Minnesota and Assiniboia to British Columbia, south to New Mexico and Arizona. June-Aug.



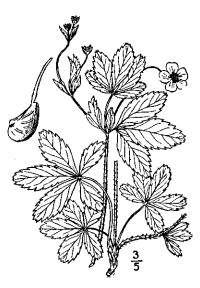
Potentilla simplex Michx. Decumbent Five-finger.

Potentilla simplex Michx. Fl. Bor. Am. 1: 303. 1803.

Potentilla canadensis simplex T. & G. Fl. N. Am. 1: 443. 1840.

Rootstock short; stems slender, decumbent, appressed-pubescent, 3° long or less. Leaves glabrous or nearly so above, silky appressed-pubescent beneath, the basal and lower ones 5-foliolate; stipules lanceolate; petioles appressed-pubescent; leaflets oblong to oblanceolate or obovate, coarsely toothed except near the base, \(\frac{3}{4}'-2\frac{1}{2}'\) long; peduncles solitary in the axils of upper leaves, \(\frac{1}{2}'-2\frac{1}{2}''\) long, appressed-pubescent; bractlets linear-lanceolate, \(2''-2\frac{1}{2}''\) long. about equalling the slightly broader calyx-lobes; petals yellow, obcordate, \(2\frac{1}{2}''-3''\) long; stamens 20-25; styles filiform.

Shaded grassy situations, Nova Scotia to North Carolina, Alabama, Minnesota and Missouri. May-July.

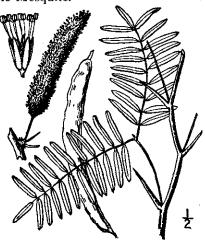


Prosopis glandulòsa Torr. Prairie Mesquite.

P. glandulosa Torr. Ann. Lyc, N. Y. 2: 192. pl. 2. 1828.

A glabrous or minutely pubescent shrub, the axils usually with a pair of sharp spines. Leaves petioled, with 2 spreading short-stalked pinnae, each of numerous sessile leaflets which are linear or linear-oblong, entire, acute or obtuse, mostly mucronulate, firm, veiny, ½'-2' long, 1"-2" wide; spikes or spike-like racemes axillary, often numerous, peduncled, very densely many-flowered, 2'-5' long, nearly ½' thick; pedicels ½"-1" long; calyx campanulate; petals 2-4 times as long as the calyx; ovary villous; pods linear, stipitate, 4'-8' long, 4"-6" wide, constricted between the seeds.

Kansas to Texas, Arizona, California and Mexico. Apparently distinct from the tropical P. juliflora (Sw.) DC. April-June.

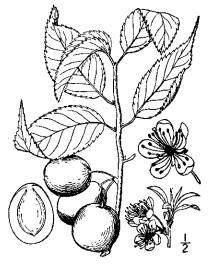


Prunus americàna Marsh. Wild Yellow or Red Plum.

Prunus americana Marsh. Arb. Am. 111. 1785.

A shrub or small tree, maximum height about 35°, and trunk diameter about 12'; branches more or less thorny; bark thick. Leaves ovate or obovate, acuminate, nearly or quite glabrous when mature, usually pubescent when young, sharply and often doubly serrate, with gland-tipped teeth, rounded at the base, slender-petioled; petioles usually glandless; flowers white, 8"-12" broad, appearing in lateral sessife umbels before the leaves; pedicels 5"-9" long; calyx-lobes pubescent within, entire; drupe globose, red or yellow, 9"-12" in greatest diameter, the skin tough, bloom little or none, the stone somewhat flattened, its ventral edge acute or margined, the dorsal faintly grooved.

Connecticut to Montana, Florida, Texas and Colorado. A southwestern race has very pubescent leaves. April-May. Fruit ripe Aug.-Oct. Horse-, hog's- or goose-plum. Native plum. Plum-granite.



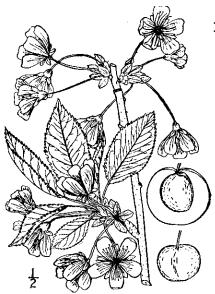
Prunus angustifòlia Marsh. Chickasaw Plum. Hog Plum.

Prunus angustifolia Marsh. Arb. Am. 111. 1785. Prunus Chicasa Michx. Fl. Bor. Am. 1: 284. 1803. P. Watsoni Sargent, Gard. & For. 7: 134. f. 25. 1894.

A small tree, sometimes 25° high, the trunk 7' in diameter, the branches somewhat thorny. Leaves lanceolate or oblong-lanceolate, acute at the apex, serrulate, often rounded at the base, glabrous when mature, 3'-5' long; flowers smaller than those of the preceding species, in lateral umbels, expanding before the leaves; drupe red, globose, 6"-9" in diameter, nearly destitute of bloom, thin-skinned, its stone ovoid, hardly flattened, both edges rounded, one of them slightly grooved.

In dry soil, southern New Jersey to Florida, west to Arkansas and Texas. Wood soft, reddish-brown; weight per cubic foot 43 lbs. April. Fruit ripe May-July.





Prunus Cérasus L. Sour Cherry. Egriot.

Prunus Cerasus L. Sp. Pl. 474. 1753.

A tree, reaching in cultivation the height of 50°, with trunk diameter of 3½°, but usually smaller. Leaves ovate or ovate-lanceolate, variously dentate, abruptly acute or acuminate at the apex, rounded at the base, glabrous on both sides, very resinous when young; flowers white, 8'-12' broad, in sessile, lateral, very scaly umbels, expanding with the leaves or before them, the scales large, spreading; pedicels little over 1½' long in flower; drupe globose, 4"-6" in diameter (larger in cultivation), black or red, sour, without bloom; stone globose.

In woods and thickets, New Hampshire to Georgia and Colorado, escaped from cultivation. Native of Europe. Wood strong, reddish-brown; weight per cubic foot 54 lbs. April-May. Fruit June-July. Its leaves unfold several days later than those of P. Avium when growing with it. This, and the following species, in the wild state, are the originals of most of the cultivated cherries.

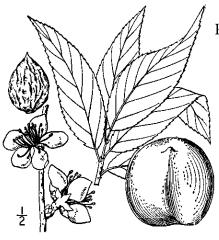


Prunus pennsylvánica L. f. Wild Red or Pigeon Cherry.

Prunus pennsylvanica L. f. Suppl. 252. 1781. Cerasus pennsylvanica Lois. Nouv. Duham. 5: 9.

A small tree, with maximum height of about 35°, and trunk diameter of 1½°, sometimes shrubby. Leaves oval or lanceolate, acute or acuminate at the apex, mainly rounded at the base, glabrous and shining on both sides, serrulate, rather slender-petioled; Lowers white, in lateral, corymbose, peduncled or sessile leafless clusters, unfolding with the leaves; pedicels slender, glabrous, 6″-12″ long; drupe globose, red, 2″-3″ in diameter, without bloom, its flesh thin and sour, its stone globular.

In rocky woods, and clearings, Newfoundland to Georgia, British Columbia and Colorado. Woods soft, light brown; weight per cubic foot 31 lbs. Dogwood. Bird-, red-, fire- or pin-cherry. April-June. Fruit ripe in August.

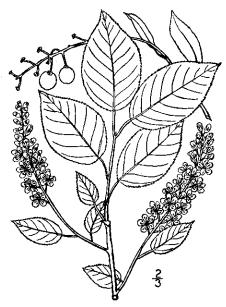


Prunus persica (L.) Batsch Peach.

Amygdalus persica L. Sp. Pl. 472. 1753.

A small tree, the purplish-brown twigs glabrous. Leaves mostly lanceolate or oblong-lanceolate, 3'-5' long, 8''-18" wide, glabrous on both sides, long-acuminate at the apex, usually narrowed at the base, finely serrulate nearly all around, thickish; petioles I"-3" long; flowers pink, ½'-2' broad, scaly-bracted; drupe subglobose, grooved, softly velvety, 1½'-3' in diameter.

Escaped from cultivation, New York to North Carolina and Florida. April-May.



Prunus virginiana var. melanocarpa (A. Nels.) Sarg.,

Rocky Mountain Wild Cherry.

Cerasus demissa melanocarpa A. Nelson, Bot. Gaz.

P. melanocarpa Shafer; Britton & Shafer, N. A. Trees 504. 1908.

A shrub or small tree, with greatest height of about 30° and trunk diameter of 1½°, but usually much smaller. Leaves glabrous, similar to those of the preceding species, but thicker, acute or often obtusish at the apex, and with shorter teeth; flowers white, 4"-5" broad; racemes generally dense, short or elongated, densely-flowered, terminating leafy branches; drupe dark purple or black (rarely yellow), sweet or but slightly astringent, globose, 3"-4" in diameter.

Prairies and dry soil, North Dakota to Nebraska and New Mexico, west to British Columbia and California. Wood hard, not strong, light brown; weight per cubic foot 43 lbs. Western choke-cherry. May-July. Fruit ripe in August. Padus demissa (Nutt.) Roemer, of northwestern America, with leaves pubescent beneath, and red or purplish fruit, may not be distinct from P. nana.

Prunus virginiana var. virginiana L.

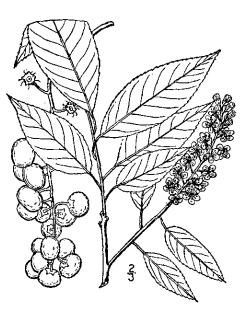
Black Cherry. Cabinet or Rum Cherry.

Prunus virginiana L. Sp. Pl. 473. 1753. Padus virginiana Mill. Gard. Dict. Ed. 8, no. 3. 1768.

Prunus serotina Ehrh. Beitr. 3: 20. 1788. Prunus serotina Smallii Britton, in Britt. & Brown, Ill. Fl. 2: 253. 1897.

A large tree, with maximum height of about 90° and trunk diameter of 4°, the bark rough and black. Leaves thick, oval, oval-lanceolate or ovate, acuminate or acute at the apex, narrowed or rounded at the base, glabrous, or pubescent along the veins beneath, serrate with appressed callous teeth; flowers similar to those of the two preceding species, the racemes elongated, spreading or drooping, terminating leafy branches, petals obovate; drupe globose, 4"-5" in diameter; dark purple or black, sweet but slightly astringent.

In woods or open places, Nova Scotia to Florida, South Dakota. Kansas and Texas. Wood hard, strong, reddish-brown; weight per cubic foot 36 lbs.; used in cabinet making. Wild or whiskey cherry. May. Fruit ripe Aug.-Sept.

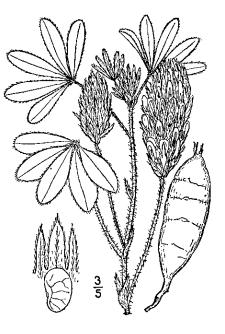


Psoralea esculénta Pursh. Pomme Blanche. Prairie Apple or Turnip. Indian Bread-root.

Psoralea esculenta Pursh, Fl. Am. Sept. 475. 1814.

Rather stout, erect from a large farinaceous root or cluster or roots, little branched, 4'-18' high, densely villous-pubescent with whitish hairs. Lower petioles 2-4 times longer than the leaves; stipules lanceolate, 8"-12" long; leaflets 5, digitate, short-stalked, oval or obovate, entire, obtuse, narrowed at base, 1'-2' long, 4"-10" wide; peduncles equalling or longer than the petioles; spikes oblong, dense, 1½-3' long, 1'-1½' thick; bracts lanceolate or ovate, acute, 5"-8" long, nearly equalling the bluish corolla; pod oblong, glabrous, about 2½" long, slightly wrinkled, enclosed in the calyx-tube.

Prairies and plains, Manitoba and North Dakota to Wisconsin, Montana, Missouri, Nebraska and Texas. Missouri bread-root. Cree- or prairie-potato. Tipsin. Tipsinna. June.



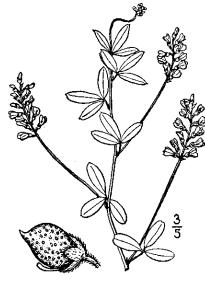
Psoralea lanceolàta Pursh. Lance-leaved Psoralea. Tumble-weed.

Psoralea lanceolata Pursh, Fl. Am, Sept. 475. 1814. P. micrantha A. Gray; Torr. Pac. R. Rep. 4: 77. 1856.

Erect, or assurgent, nearly glabrous, much branched, densely dark-glandular, light green, 1°-2° high. Root not tuberous; petioles equalling or shorter than the leaves; stipules linear, 3"-4" long, early deciduous; leaflets 3, digitate, sessile, sometimes with a few scattered hairs, linear to oblanceolate, entire, varying from acute to obtuse or even emarginate at the apex, narrowed or cuneate at the base, 8"-15" long, 2"-4" wide; peduncles slender; spikes dense, short, 4"-6" thick, 6-10-flowered; bracts membranous, caducous; flowers bluish-white, 3" long; corolla 2-3 times as long as the calyx; pod subglobose, about 2" long, sparingly pubescent, or glabrous, punctate; seed globose, brown.

In dry soil, Iowa to North Dakota, Saskatchewan, Kansas, Arizona and British Columbia. June-July.





Psoralea tenuiflòra Pursh. Few-flowered Psoralea.

Psoralea tenuistora Pursh, Fl. Am. Sept. 475. 1814.

Erect, finely appressed-canescent, especially when young, punctate, much branched, slender, 2°-4° high. Root not tuberous; leaves short-petioled, digitately 3-5-foliolate; stipules subulate, I"-2" long; leaflets very short-stalked, entire, oval, oblong or elliptic, 6"-10" long, 1½"-3" wide, obtuse and mucronulate at the apex, narrowed or cuneate at the base; peduncles slender, longer than the leaves; racemes loosely 6-14-flowered, 1'-3' long; bracts scale-like, persistent; flowers purplish, 2'' long; corolla about twice the length of the calyx; pod ovate, glabrous, punctate, 2''-3'' long; seed ovoid, brown.

Prairies, Illinois to South Dakota, Texas and Sonora, west to Colorado and Montana. Scurvy-pea. May-Oct.

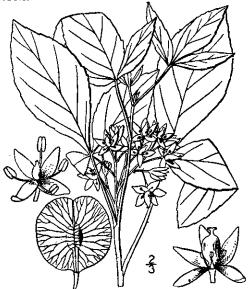
Psoralea obtusiloba T. & G., doubtfully recorded from Kansas in our first edition, is not definitely known within our area.

Ptelea trifoliàta L.

Three-leaved Hop-tree. Shrubby Trefoil. Ptelea trifoliata L. Sp. Pl. 118. 1753.

A shrub or small tree, with a maximum height of about 20° and trunk diameter of 6'. Leaves long-petioled, 3-foliolate, pubescent when young, glabrate when old, or sometimes persistently pubescent; leaflets ovate or oval, 2'-5' long, sessile, crenulate, acute or obtuse, the lateral ones somewhat oblique, the terminal one more or less cuneate at the base; flowers about 5" broad, in terminal compound cymes; odor disagreeable; sepals 2" long, obtuse; petals about 3" long, oblong; samara 8"-9" in diameter, the wing membranous and reticulated, emarginate, tipped with the minute persistent style or this finally deciduous.

In woods, Connecticut to Florida, west to southern Ontario, Minnesota, Kansas and Mexico. Consists of many trivially different as a substitute for hops. The foliage has an unpleasant odor. Wood light brown; weight per cubic foot 43 lbs. Ague-bark. Quininetree. Pickaway-anise. Prairie-grub. Wafer-ash. Swamp-dogwood. Wingseed, June.



Pulsatilla patens (L.) Mill. Pasque Flower.

Anemone patens L. Sp. Pl. 538. 1753.

P. patens Mill. Gard. Dict. Ed. 8, No. 4. 1768.

Clematis hirsutissima Pursh. Fl. Am. Sept. 385. 1814. Anemone Nuttalliana DC. Syst. 1: 193. 1818.

Anemone patens var. Nuttalliana A. Gray, Man. Ed. 5. 36. 1867.
P. hirsutissima Britton, Ann. N. Y. Acad. Sci. 5: 217.

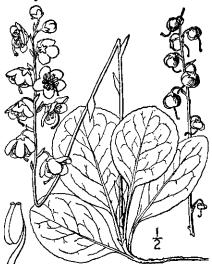
Villous, 6'-16' high. Leaves much divided into narrow linear acute lobes, the basal on slender petioles, those of the involucre sessile and erect or ascending; sepals ovate-oblong, light bluishpurple; fruit a head of silky achenes with long

In dry soil, prairies of Illinois to British Columbia, Nebraska and Texas. Europe and northern Asia. After flowering the peduncle elongates, sometimes to a foot or more. Consists of several races, the American ones mostly with wider leaf-lobes than the European. March-

plumose styles, like those of some Clematis.

April. American pulsatilla. Hartshorn- or head-ache-plant. Wild crocus. Mayflower. Easterflower. Gosling. Badger. April-fools. Prairie-smoke or -anemone. Wind-flower. Rock-lily.

Pýrola americana Sweet. Round-leaved American Wintergreen.



Pyrola americana Sweet, Hort. Brit. Ed. 2, 341. 1830.

Scape 6'-20' high, 6-20-flowered, several-bracted. Leaf-blades orbicular or oval, spreading, obtuse, coriaceous, shining above, crenulate, narrowed, rounded, truncate or rarely subcordate at the base, I'-3' long; flowers white, nodding, very fragrant, 7"-9" broad; pedicels 2"-3" long, mostly longer than their bracts; calyx-lobes oblong or lanceolate, about one-third the length of the obtuse, converging, thick petals; stamens and style declined-ascending; style exserted, annular under the stigma; anther-sacs mucronate at base; capsule 2"-3" in diameter.

In dry woods, Nova Scotia to South Dakota, Georgia and Ohio. False, larger, or pear-leaved wintergreen. Indian or canker lettuce. Wild or liverwort lettuce. Copper- or dollar-leaf. Consumption-weed. June-July. Included in *P. rotundifolia* L. in our first edition, which proves to be a distinct Old World species.

Pyrola grandiflora Radius (P. rotundifolia pumila Hornem.), a high boreal species, extending south to mountain cliffs in Quebec, is smaller-leaved, lower, the flower white to crimson.

Pyrola asarifolia ssp. asarifolia Michx.

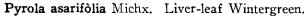
Bog Wintergreen.

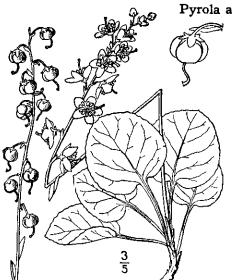
Pyrola uliginosa Torr. Fl. N. Y. 1: 453. pl. 60. 1843. Pyrola rotundifolia var. uliginosa A. Gray, Man. Ed. 2, 259. 1856.

Scape 6'-15' high, 7-15-flowered. Leaf-blades broadly oval, or orbicular, dull, rather thick, obscurely crenulate, obtuse at both ends, sometimes truncate at the base, equalling or shorter than their petioles; bracts shorter than or equalling the pedicels; flowers purple, 5"-8" broad; calyx-lobes ovate-oblong or ovate-lanceolate, acute or obtuse, one-fourth to one-third the length of the obtuse petals; stamens and style declined-ascending; anther-sacs beaked; style slightly exserted; capsule about 2½" in diameter.

In swamps and bogs, Newfoundland to Alaska, Vermont, central New York, Michigan, in the Rocky Mountains to Colorado, and to California. Similar to the Asiatic P. incarnata Fisch., and perhaps not specifically distinct from it, June-July.







Pyrola asarifolia Michx. Fl. Bor. Am. 1: 251. 1803.

Pyrola rotundifolia var. asarifolia Hook. Fl. Bor. Am. 2: 46. 1834.

Similar to the preceding species. Leaf-blades reniform, usually wider than long, coriaceous, shining above, obtuse at the apex, cordate at the base, crenulate, 1'-1½' long, usually shorter than their narrowly margined petioles; flowers racemose, nodding, purple, or rose, 6"-8" broad; calyx-lobes triangular-lanceolate or ovate-lanceolate, acute or acuminate, about one-third the length of the obtuse petals; stamens and style decurved-ascending; anther-sacs slightly beaked; style exserted; capsule about 3" in diameter.

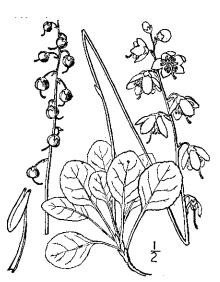
In wet woods and swamps, New Brunswick to Yukon Territory, south to Massachusetts, northern New York, Michigan, South Dakota, and in the Rocky Mountains to New Mexico. June-July.

Pyrola chlorántha Sw. Greenish-flowered Wintergreen.

P. chlorantha Sw. Act. Holm, 1810; 190, pl. 5, 1810.

Scape 4'-12' high, 3-to-flowered. Blades orbicular, or broadly oval, mostly obtuse at both ends, but sometimes narrowed at the base, coriaceous, dull, obscurely crenulate, or entire, ½'-1½' long, shorter than or equalling their petioles; flowers nodding, slightly odorous, greenish-white, 5"-7" broad; pedicels 2"-3" long, mostly longer than their bracts; calyx-lobes ovate, or triangular-ovate, acute or obtuse, about one-fourth the length of the obtuse converging petals; stamens and style declined-ascending; anther-sacs short-beaked; style exserted; capsule about 3" in diameter.

In dry woods, Labrador to British Columbia, south to the District of Columbia, Illinois, Nebraska and in the Rocky Mountains to Arizona. Also in Europe, Shin-leaf. June-July.





Pyrola ellíptica Nutt. Shin-leaf.

Pyrola elliptica Nutt. Gen. 1: 273. 1818.

Scape 5'-10' high, 7-15-flowered. Leaf-blades broadly oval, or elliptic, thin or membranous, dark green, obtuse, but usually mucronulate at the apex, narrowed or rounded at the base, plicate-crenulate with very low teeth, 1½'-3' long, almost always longer than their petioles; flowers greenish-white, nodding, 6"-8" broad, very fragrant; pedicels longer than or equalling their bracts; calyx-lobes ovate-triangular, acute or acuminate, about one-fourth as long as the obtuse, flat petals; stamens and style declined-ascending; anther-sacs scarcely beaked; style somewhat exserted; capsule about 3" in diameter.

In rich, mostly dry woods, Nova Scotia to British Columbia, south to the District of Columbia, Illinois, Michigan, Iowa, South Dakota and in the Rocky Mountains to New Mexico. Wild lily-of-the-valley. June-Aug.



Pyrola minor L. Lesser Wintergreen.

Pyrola minor L. Sp. Pl. 396. 1753.

Scapes slender, 8' high or less, several-flowered. Leaf-blades rather thin, broadly oval, or nearly orbicular, dark green, crenulate, obtuse but sometimes mucronate at the apex, rounded, slightly narrowed, or subcordate at the base, 9"-18" long; flowers racemose, nodding, white or pinkish, 3"-4" broad; pedicels 1"-2½" long, equalling or longer than the bracts; calyx-lobes mostly triangular-ovate and acute, much shorter than the connivent petals; style straight, included; stamens not declined, connivent around the pistil; petals oval or orbicular, obtuse; capsule about 2½" in diameter.

In woods, Greenland and Labrador to Alaska, south to northern New England, Ontario, Michigan and Oregon, south in the Rocky Mountains to New Mexico. Also in Europe and Asia. Wood-lily. Shin-leaf. June-Aug.

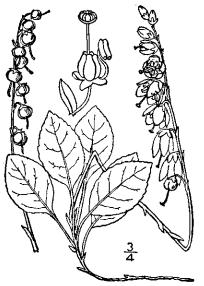
Pyrola secúnda L. Serrated or One-sided Wintergreen.

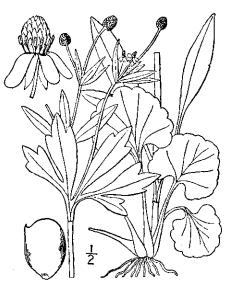
Pyrola secunda L. Sp. Pl. 396. 1753.

Pyrola secunda pumila Paine, Cat. Plants Oneida Co., N. Y. 135.

Scapes usually several together from the muchbranched rootstock, slender, 2'-10' high. Leaf-blades ovate, or oval, or nearly orbicular, mostly thin, acute, or rarely obtuse at the apex, rounded or narrowed at the base, crenulate-serrulate, 6"-2' long, longer than their petioles; flowers many, in a dense one-sided raceme, at first erect, soon drooping, white or greenish-white, 3"-4" broad; pedicels short; calyx-lobes ovate, obtuse, or obtusish, very short; petals oval, obtuse, with a pair of tubercles at the base, campanulate-connivent; style straight, exserted; stamens not declined, connivent around the pistil; capsule about 2" in diameter.

In woods and thickets, Labrador to Alaska, south to the District of Columbia, Pennsylvania, Michigan, Nebraska, along the Rocky Mountains to Mexico and to California. Ascends to 3000 ft. in the Adirondacks. Also in Europe and Asia. Shin-leaf. June-July.





Ranunculus abortivus L. Kidney- or Smooth-leaved Crowfoot.

Ranunculus abortivus L. Sp. Pl. 551. 1753.

R. abortivus encyclus Fernald, Rhodora 1: 52. 1899.

Glabrous, or but sparingly pubescent, 6'-2° high, branched. Basal leaves long-petioled, bright green, thick, crenate or sometimes lobed, broadly ovate, obtuse, and generally cordate or reniform, the cauline sessile or nearly so, divided into oblong or linear somewhat cuneate lobes; head of fruit globose, the receptacle short, pubescent; flowers yellow, 2"-3" broad, the petals oblong, shorter than the reflexed calyx; achenes tipped with a minute curved beak.

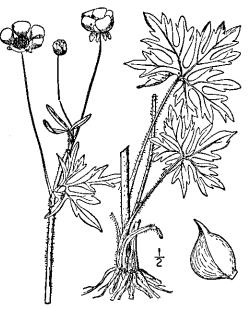
In woods and moist grounds, Labrador and Nova Scotia to Manitoba, south to Florida, Arkansas and Colorado. Recorded as biennial in duration. April-Iune.

Ranunculus àcris L. Tall or Meadow Buttercup.

Ranunculus acris L. Sp. Pl. 554. 1753.

Erect, hairy, branched above, 2°-3° high; roots fibrous. Basal leaves tufted, petioled, 3-7-divided, the divisions sessile and cleft into numerous linear to obovate mainly acute lobes; upper leaves short-petioled and-merely 3-parted, distant; flowers numerous, bright yellow, about 1' broad; petals twice or thrice the length of the spreading calyx, obovate; head of fruit globose, 6"-7" broad; achenes compressed, short-beaked.

In fields and meadows, Newfoundland to Virginia, British Columbia and Missouri. Bermuda. Naturalized from Europe. Stem sometimes nearly glabrous. Yellow gowan. Gold-knops. Butter-rose, -cresses or -daisy. Horse-gold. Bachelor's-buttons. Blister-plant. May-Sept.



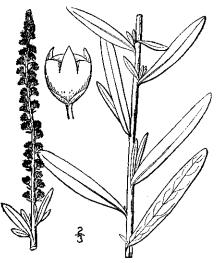


Ranunculus bulbòsus L. Bulbous Buttercup. Yellow weed or Gowan.

Ranunculus bulbosus L. Sp. Pl. 554. 1753.

Erect from a bulbous-thickened base, hairy, 6'-18' high. Leaves petioled, 3-divided, the terminal division stalked, the lateral ones sessile or nearly so, all variously lobed and cleft, flowers bright yellow, about 1' broad; petals 5-7, much longer than the reflexed sepals, obovate, rounded; head of fruit globose, 5"-6" broad; achenes compressed, very short-beaked.

In fields and along roadsides, New England to North Carolina, Tennessee and Louisiana. Naturalized from Europe. May-June. In England the name Buttercups is chiefly applied to this species and to R. repens and R. acris; called also in middle English Kingcups, Goldcups, Butter-flowers and Blister-flowers. Frogwort. Pilewort. Golden knops. Cuckoobuds. Pissabed. Horse-gold. St. Anthony's-turnip. May-July.

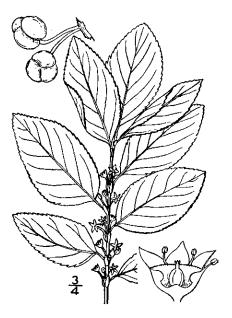


Reseda Lutèola L. Dyer's Rocket. Yellow-weed.

Reseda Luteola L. Sp. Pl. 448. 1753.

Glabrous, erect, simple, or sparingly branched above, 1°-2½° high. Leaves lanceolate or linear, entire, obtuse, sessile or the lowest narrowed into a petiole; flowers greenish-yellow, 1"-2" broad, in long narrow spikes; sepals 4; petals 4 or 5, very unequal, the upper ones lobed, the lower one linear, entire; capsule globose, 2"-3" in diameter, with 3 or 4 apical teeth and 6-8 lateral ridges.

In waste places and in ballast, Massachusetts to New York and Pennsylvania. Mexico. Adventive from Europe, Cultivated for its yellow dye. Summer. Dyer's-weed. Dyer's-mignonette. Weld. Yellow or Italian rocket. Dutch pink. Wild woad.



Rhamnus alnifòlia L'Her. Alderleaved Buckthorn. Dwarf Alder.

Rhamnus alnifolia L'Her, Sert. Angl. 5. 1788.

A small shrub, with puberulent thornless branches. Leaves oval to elliptic, 2'-4' long, 1'-2' wide, obtuse to acuminate at the apex, mainly acute at the base, irregularly crenate-serrate; veins 6-7 pairs; petioles 3"-6" long; flowers 5-merous, solitary or 2-3 together in the axils, green, about 1½" broad, mainly dioecious, appearing with the leaves; petals none; fruiting pedicels 3"-4" long; drupe globose, or somewhat obovoid, about 3" in diameter; nutlets 3, grooved.

In swamps, Newfoundland to British Columbia, south to New Jersey, Illinois, Nebraska, Wyoming and California, Dogwood, May-June,

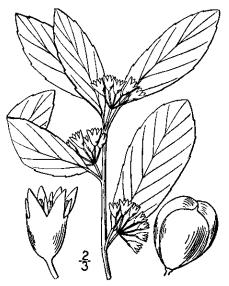
Rhamnus cathàrtica L. Buckthorn.

Rhamnus caroliniàna Walt. Carolina Buckthorn. Bog-birch.

Rhamnus caroliniana Walt. Fl. Car. 101. 1788. Frangula caroliniana A. Gray, Gen. 2: 178. 1849.

A tall thornless shrub, or small tree, with puberulent twigs. Leaves elliptic or broadly oblong, glabrous, or somewhat hairy on the veins beneath, 2'-6' long, I'-2½' wide, acute or acuminate at the apex, obtuse or acute at the base, obscurely serrulate or even entire; veins 6-10 pairs; petioles 6"-9" long; flowers 5-merous, perfect, greenish, about I" broad, in axillary peduncled umbels, or some of them solitary, unfolding after the leaves; calyx finely puberulent, or glabrous, campanulate, its lobes lanceolate, acuminate; petals present; drupe globose, sweet, about 4" in diameter; nutlets 3, not grooved.

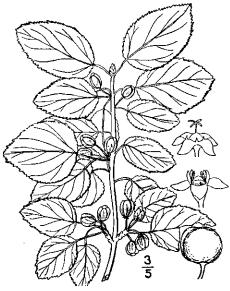
In swamps and low grounds, Virginia and Kentucky to Missouri, Kansas, Florida and Texas. Erroneously recorded from New Jersey. Alder-leaved buckthorn. Indian-cherry. May-June.

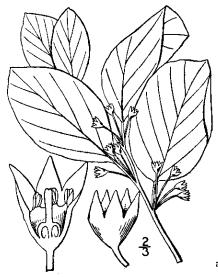


Rhamnus cathartica L. Sp. Pl. 193. 1753.

A shrub, 6°-20° high, the twigs often ending in stout thorns. Leaves glabrous, petioled, broadly ovate or elliptic, 1½'-2½' long, about 1' wide, regularly crenate or crenulate, acute, obtuse or acuminate at the apex, obtuse or acutish at the base, with 3-4 pairs of veins, the upper running nearly to the apex; flowers dioecious, greenish, about 1" wide, clustered in the axils, unfolding a little later than the leaves; petals, stamens and calyx-teeth 4; petals very narrow; drupe globose, black, about 4" in diameter; nutlets 3 or 4, grooved.

In dry soil, escaped from hedges, New England, the Middle States and Ontario. Introduced from Europe and native also of northern Asia. May-June. Hart's-thorn. Rhineberry. Waythorn. Purging buckthorn. The berries yield a dye, and have powerful medicinal properties.





Rhamnus Frángula L. Alder Buckthorn. Black Dogwood.

Rhamnus Frangula L. Sp. Pl. 193. 1753.

A shrub, reaching a maximum height of about 8°, the young twigs finely and sparsely puberulent. Leaves thin, elliptic or obovate, entire or very obscurely crenulate, glabrous on both surfaces, obtuse or cuspidate at the apex, rounded or narrowed at the base, 1½-2½ long, 1'-1½ wide; petioles 2"-4" long; umbels 1-6-flowered, strictly sessile in the axils; flowers 5-merous, perfect; calyx nearly hemispheric, its lobes ovate, acute; fruiting pedicels 2"-5" long; fruit 3"-4" in diameter, the 3 nutlets compressed, not grooved.

In bogs, Long Island, northern New Jersey and Ontario. Naturalized from Europe. May-June. Blackalder. Berry-alder. Arrow-wood. Persian-berry.



Rhexia virgínica L. Meadow-Beauty. Deer-grass.

Rhexia virginica L. Sp. Pl. 346, 1753. Rhexia latifolia Bush, Rhodora 13: 167, 1911.

Stem rather stout, simple or branched above, square, the angles often slightly winged, more or less pubescent, $1^{\circ}-1\frac{1}{2}^{\circ}$ high. Leaves ascending, sessile or short-petioled, ovate or ovate-oval, acute or acutish at the apex, rounded or rarely narrowed at the base, 1'-2' long, 6''-12'' wide, usually with a few scattered hairs on both surfaces, mostly 5-nerved, the margins ciliate-serrulate; flowers bright purple, cymose, short-pedicelled, $1'-1\frac{1}{2}'$ broad; calyx-tube and pedicels glandular-pubescent; petals rounded or slightly retuse; anthers linear, curved, minutely spurred on the back.

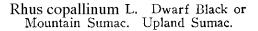
In sandy swamps, Maine to Florida, Ontario, northern New York, Iowa, Missouri and Louisiana. Ascends to 2000 ft. in Pennsylvania. Handsome Harry. July-Sept.

Rhododendron máximum L. Great Laurel. Rose Bay.

Rhododendron maximum L Sp. Pl. 392. 1753.

A tall shrub, or sometimes a tree, with maximum height of about 40° and trunk diameter of 1°. Leaves oblong, lanceolate-oblong or broadly oblanceolate, dark green on both sides, acute or abruptly short-acuminate at the apex, narrowed to a mostly acute base, 4'-7' long, 1'-2½' wide, glabrous, drooping in winter; petioles stout, ½'-1' long; pedicels glandular, viscid-pubescent, 1'-2' long; corolla 1½'-2' broad, about 1' long, rather deeply 5-cleft into oval obtuse lobes, rose-color, varying to white, sprinkled with yellowish or orange spots within; calyx-lobes oblong, obtuse; capsule oblong, puberulent, 5"-7" high.

In low woods and along streams, Nova Scotia, Quebec, Ontario and Ohio to Georgia and Alabama, chiefly along the mountains, often forming almost impenetrable thickets. Wood hard, strong, light brown; weight per cubic foot 39 lbs. Deerlaurel. Big-leaf laurel. Wild or dwarf rose-bay. Cow-plant. Spoon-hutch. Mountain, horse- or bee-laurel. June-July.



Rhus copallina L. Sp. Pl. 266. 1753.

A shrub, or sometimes a small tree, with maximum height of about 20° and trunk diameter of 6′. Leaves pinnate, 6′-12′ long, the petiole and rachis more or less pubescent; leaflets 9-21, ovate-lanceolate or oblong-lanceolate, inequilateral, acute or obtusish at each end, entire, or few-toothed toward the apex, dark green and glabrous above, paler and often pubescent beneath; rachis wing-margined between the leaflets; flowers polygamous, green, 1½″ broad, in dense terminal panicles; pedicels and calyx finely pubescent; drupe compressed, 2″ in diameter, crimson, covered with short fine acid hairs.

In dry soil, Maine and southern Ontario to Florida, west to Minnesota, Nebraska and Texas. Not poisonous. Leaves and bark contain much tannin and are collected in large quantities in the southern States, and ground for tanning leather. Wood soft, light brown; weight per cubic foot 33 lbs. Ascends to 2600 ft. in North Carolina. Smooth or common sumac. June-Aug,



Rhus aromatica Ait.

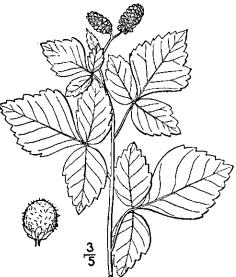
Fragrant or Sweet-scented Sumac. Toxicodendron crenatum Mill, Gard, Dict. Ed. 8, no. 5, 1768.

Rhus aromatica Ait, Hort. Kew. 1: 367. 1789. Rhus canadensis Marsh. Arb. Am. 129. 1785. Not Mill. 1768.

S. aromatica Desv.; Steud. Nom. Ed. 2, 2: 531.

Schmaltzia crenata Greene, Leaflets 1: 128. 1905. A shrub, 3°-8° high, ascending or diffuse. Leaves petioled, 3-foliolate, 2'-4' long, aromatic; leaflets ovate or rhomboid, 1'-2' long, 9"-18" wide, the lateral ones sessile, the terminal short-stalked, acute or obtusish at the apex, the lateral rounded or truncate, the terminal cuneate at the base, all crenate or crenate-dentate with numerous large teeth, and usually pubescent, especially when young, often permanently so; flowers yellowish green, about 1" broad, in clustered spikes; drupe globose, red, pubescent.

In rocky woods, Ontario and Vermont to Florida, especially along the mountains, west to Minnesota, Kansas and Louisiana. Consists of numerous races, differing mainly in pubescence. The catkin-like spikes are developed on the branches in late autumn. March-April.



Rhus glàbra L.

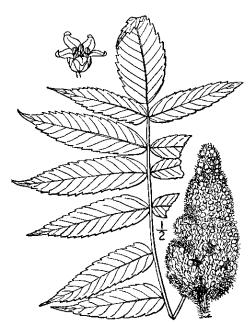
Smooth Upland or Scarlet Sumac.

White or Sleek Sumac.

Rhus glabra L. Sp. Pl. 265. 1753.

A shrub or rarely a small tree, 2°-20° high, similar to the preceding species, but glabrous and somewhat glaucous. Leaflets 11-31, lanceolate or oblong-lanceolate, 2'-4' long, acuminate at the apex, rounded and often oblique at the base, dark green above, whitish beneath, sharply serrate, rachis not winged; pedicels sometimes slightly pubescent; inflorescence and fruit similar to those of the two preceding species; drupe covered with short reddish acid hairs.

In dry soil, Nova Scotia to Minnesota, south to Florida, Mississippi and Louisiana. Several specific names have been proposed for trivially different races of this species. Foliage sometimes used for tanning. This species and the two preceding sometimes have the whole or a part of the flower-clusters changed into small leaves. A race with laciniate leaflets (R. bipinnata Greene) occurs in southern Pennsylvania and Delaware. Pennsylvania sumac. Shoe-make. Senhalanac. Vinegartree. June-Aug.



Rhus hírta (L.) Sudw. Staghorn Sumac. Fig.

Datisca hirta L. Sp. Pl. 1037. 1753. Rhus typhina L. Amoen. Acad. 4: 311. 1760. Rhus hirta Sudw. Bull. Torr. Club 19: 82. 1892.

A small tree, with maximum height of 40° and trunk diameter of 9', or often shrubby. Leaves pinnate, 8'-15' long; petioles, rachis and twigs more or less densely velvety-pubescent; leaflets 11-31, lanceolate or oblong-lanceolate, 3'-5' long, acuminate at the apex, rounded at the base, sharply serrate, dark green and nearly glabrous above, pale and more or less pubescent beneath; panicles terminal, dense; flowers green, polygamous, 1½" broad; drupe globose, 1½"-2" in diameter, very densely covered with bright crimson hairs.

In dry or rocky soil, Nova Scotia to Georgia, especially along the mountains, west to southern Ontario, South Dakota and Iowa. Wood soft, greenish-yellow; weight per cubic foot 27 lbs. Bark rich in tannin. A race with laciniate leaflets has been found in New Hampshire, June. Vinegar-tree. American, Virginia, hairy or velvet-sumac. Staghorn.

Rhus trilobata Nutt.

Ill-scented Sumac. Skunk-bush.

Rhus trilobata Nutt.; T. & G. Fl. N. A. I; 219, 1838.

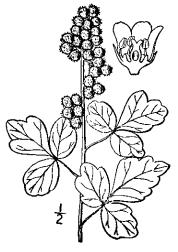
Anus tritoogia Nutt.; 1. & G. Fl. N. A. 1; 219. 1838.

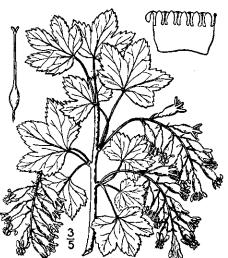
Rhus aromatica var. trilobata A. Gray.; S. Wats. Bot. King's Exp. 53. 1871.

Schmaltzia trilobata Small, Fl. SE. U. S. 728. 1903.

A glabrous or somewhat hairy shrub, $2^{\circ}-6^{\circ}$ high. Leaves petioled, 3-foliolate, unpleasantly odorous, 1'-2' long; leaflets sessile, or nearly so, $\frac{1}{2}'-1'$ long, puberulent when young, usually glabrous when mature, ovate or oval, obtuse or obtusish, the terminal one commonly considerably larger than the lateral and cuncate at the base, all crenately fewlobed or toothed or sometimes entire; flowers as in the preceding species, and fruit similar.

Illinois to South Dakota, Texas, Montana, New Mexico and California. March. Races differ much in pubescence.





Ribes americànum Mill. Wild Black Currant.

Ribes americanum Mill. Gard. Dict. Ed. 8, No. 4.

Ribes floridum L'Her. Stirp. Nov. 1: 4. 1784. Ribes nigrum var. pennsylvanicum Marsh. Arb. Amer. 132. 1785.

Ribes pennsylvanicum Lam. Encycl. 3: 49. 1789.

Branches erect, unarmed. Petioles slender, loosely pubescent, or glabrous; leaves nearly orbicular, glabrous above, somewhat pubescent and resinous-dotted beneath, 1'-3' wide, sharply 3-5-lobed, the lobes dentate-serrate, acutish; racemes pendulous, rather loosely flowered, pubescent; bractlets linear, much exceeding the pedicels, or shorter; flowers greenish-white, or yellowish, 4"-5" long; calyx tubular, its lobes short, broad, obtuse; stamens not exserted; fruit globose-ovoid, black, glabrous, 3"-5" in diameter.

In woods, Nova Scotia to Virginia, Manitoba, Assiniboia, Kentucky, Iowa and Nebraska. Also in New Mexico. Quinsy-berry. April-May.



Ribes glandulòsum Grauer. Fetid Currant.

Ribes glandulosum Grauer, Pl. Min. Cog. 2. 1784. R. prostratum L'Her. Stirp. Nov. 3. pl. 2. 1785.

Branches decumbent or spreading, thornless and without prickles. Petioles slender, 1'-3' long, pubescent or glabrous, the dilated base sometimes ciliate; leaves nearly orbicular, sharply and deeply 5-7-lobed, 1'-3' wide, usually somewhat pubescent along the veins beneath, the lobes acute or acutish, dentate-serrate; flowers racemose, about 2½" broad; pedicels 2"-2½" long, glandular, calyx broadly campanulate, its lobes short and broad; stamens short, not exserted; fruit red, glandular-bristly, about 3" in diameter.

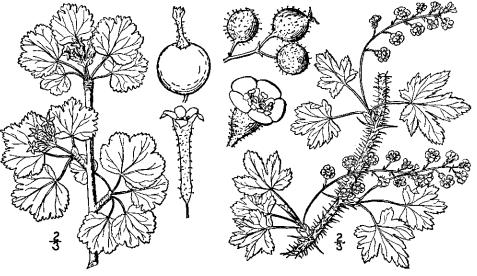
In cold wet places, Newfoundland to Athabasca, British Columbia, south, especially along the mountains, to North Carolina, Michigan and Wisconsin. Plant with a disagreeable odor. Ascends to 6000 ft. in North Carolina. Skunk-currant, May-June.

Ribes inèbrians Lindl. White-flowered Currant.

Ribes inebrians Lindl. Bot. Reg. pl. 1471. 1832.

Unarmed. Petioles slender, more or less glandular-pubescent, 3"-10" long; leaves reniform-orbicular, cordate at the base, ½'-1½' wide, sparingly glandular-pubescent, or glabrate on both sides, 3-5-lobed, the lobes very obtuse, crenate or crenulate; racemes short, pubescent, pendulous, bractlets rhombic, much longer than the pedicels, persistent, usually entire-margined and glandular-ciliate: flowers sessile or short-pedicelled, white or greenish-white; calyx tubular, glandular; petals minute, nearly orbicular; sta-mens short; fruit red, insipid, glandular or rarely smooth, about 3" in diameter.

South Dakota to Idaho, Nebraska, New Mexico and California. May-June. Confused in our first edition with the similar R. cereum Dougl.

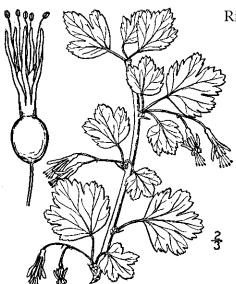


Ribes lacústre (Pers.) Poir. Swamp Gooseberry.

Ribes oxyacanthoides var. lacustre Pers. Syn. 1: 252. 1805. Ribes lacustre Poir. in Lam. Encycl. Suppl. 2: 856. 1811.

Spines slender, weak, generally clustered. Branches usually densely bristly; petioles slender, more or less pubescent; leaves nearly orbicular, thin, glabrous or nearly so, deeply 5-7-lobed, 1'-7' wide, the lobes obtuse or acutish, incised-dentate; flowers racemose, green or purplish, about 2" long; pedicels slender, bracted at the base, about 2" long: calvx-tube short, its lobes short, broad, spreading; stamens very short, not exserted; berry 2"-5" in diameter, reddish, covered with weak gland-tipped bristles.

In swamps and wet woods, Newfoundland to Massachusetts, New York, Pennsylvania, Michigan, Alaska and California, May-June.



Ribes rotundifolium Michx.

Eastern Wild Gooseberry.

Ribes rotundifolium Michx. Fl. Bor. Am. 1: 110. 1803. Grossularia rotundifolia Cov. & Britt. N. A. Fl.

22:223. 1908.

Nodal spines commonly short, or often altogether wanting, and the prickles few or none. Leaves suborbicular, broadly cuneate to subcordate at the base, pubescent, at least beneath, when young; peduncles rather short, nodding; flowers I-3, greenish-purple, 3"-4" long, pedicelled; calyx-lobes linear-oblong, at least twice as long as the tube; stamens exserted for about 4 their length; berry globose, glabrous, purplish, usually not more than 4" in diameter.

In rocky woods, western Massachusetts and southeastern New York to North Carolina, especially along the mountains. Smooth gooseberry. Ricinus communis L. Castor-oil Plant. Castor-bean. Palma Christi.

Ricinus communis L. Sp. Pl. 1007. 1753.

Stem erect, 3°-15° tall, more or less branched, becoming tree-like in warm regions. Leaves nearly orbicular in outline, 4'-2° broad, 6-11-palmately-lobed and peltate, the lobes toothed, acute or acuminate; capsule 6"-8" in diameter, usually spiny; sometimes smooth; seeds shining, smooth, black, variegated with white, or mottled with gray and brown markings.

In waste places, escaped from cultivation, New Jersey to Florida and Texas. An imposing ornamental plant, and also of medicinal value. Widely naturalized in warm and tropical regions. Oil-plant, Mexico-seed. Stedfast. Man's-motherwort.

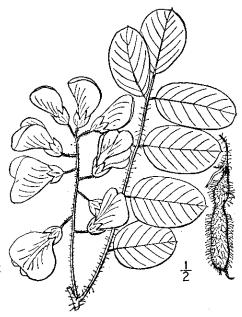


Robinia híspida L. Rose Acacia. Bristly or Moss Locust.

Robinia hispida L. Mant. 101. 1767.

A much-branched shrub, 3°-9° high. Twigs, petioles, pedicels and rachises of the leaves bristly; stipules very small, or none; leaflets 9-13, stalked, broadly ovate or oblong, entire, mainly obtuse or rounded at each end, mucronate, 1'-2' long; stipels none or subulate; racemes loose; pedicels 3"-6" long; flowers pink or purple, 8"-15" long, not fragrant; pods linear, bristly-hispid.

Mountains of Virginia to eastern Tennessee and Georgia. Often cultivated for ornament. Honey locust. May-June.

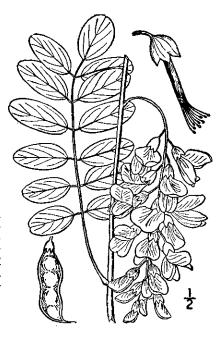


Robinia Pseudo-Acàcia L. Locust-tree. False or Bastard Acacia.

Robinia Pseudo-Acacia L. Sp. Pl. 722. 1753. Pseudo-Acacia odorata Moench, Meth. 145. 1789.

A large tree with very rough bark, maximum height of about 80° and trunk diameter of 3½°, rarely shrubby. Twigs and foliage nearly glabrous; stipules often spiny; leaflets 9-19, stalked, ovate or oval, mainly rounded at the base, obtuse or emarginate and mucronulate at the apex, entire, I'-2' long; stipels small, setaceous; racemes loose, drooping; pedicels slender, 3"-6" long; flowers white, fragrant, 7"-10" long, the standard yellowish at base; pod glabrous, 2'-4' long, about 6" wide, 4-7-seeded.

Monroe Co., Pa., south, especially along the western slopes of the mountains, to Georgia, west to Iowa, Missouri and Oklahoma. Extensively naturalized elsewhere in the United States and eastern Canada and in Europe. Wood strong, very durable, greenish brown, the sap-wood yellow; weight per cubic foot 46 lbs, Much used for posts, in ship-building, and especially for tree-nails. Called also white, yellow, black, red-flowering or green locust. Honey-, pea-flower or post-locust. Silver-chain. May-June.



Rorippa nasturtium-aquaticum (L.) Hayek

Sisymbrium Nasturtium-aquaticum L. Sp. Pl. 657.

1753. Nasturtium officinale R. Br. in Ait. Hort. Kew. Ed. 2, 4: 110. 1812.

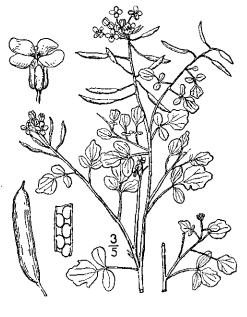
Ed. 2, 4: 110. 1812. Roripa Nasturtium Rusby, Mem. Torr. Club 3: Part 3, 5, 1893.

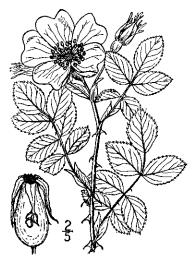
Part 3, 5, 1893.
Radicula Nasturtium-aquaticum Britten & Rendle,
Brit. Seed Plants 3, 1907.

Glabrous, branching, floating or creeping, rooting from the nodes. Leaves of 3-9 segments, the terminal one larger than the lateral, all obtuse, ovate or oval, or the terminal one nearly orbicular; racemes elongating in fruit; flowers 2"-2½" broad; petals twice the length of the calyx; pods 6"-16" long, 1" wide, spreading and slightly curved upward, on pedicels of about their length; seeds distinctly in 2 rows.

In brooks and streams, Nova Scotia to Manitoba, Virginia, Missouri, Arizona and California. Common in most districts. Naturalized from Europe. Native also of northern Asia and introduced into the West Indies and South America. Widely cultivated for salad. Well- or watergrass. Crashes. Brook-lime. Brown-cress. April-Nov.







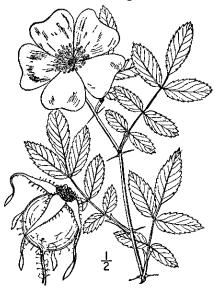
Rosa canina L. Dog Rose. Canker Rose. Wild Brier. Hip-tree or -rose.

Rosa canina L. Sp. Pl. 491. 1753.

Branches erect or straggling, sometimes 10° long, armed with stout short hooked spines, not bristly but sometimes glandular. Stipules broad, glandular; leaflets 5-7, ovate or oval, rather thick, generally obtuse at each end, usually simply and sharply serrate, sometimes pubescent beneath, glabrous or nearly so above, I'-1½' long; flowers solitary or few, pink varying to white; calyx-lobes much lobed, lanceolate, reflexed; styles distinct; fruit long-ovoid, 6"-9" long, usually glabrous.

In waste places, especially along roadsides, Nova Scotia to western New Jersey and eastern Pennsylvania, Virginia and Tennessee. Naturalized or adventive from Europe; native also in northern Asia. Cat-whin. Canker-blooms (Shakspere). Bramble-brier or brere-rose. Lawyers (i. e. an old thorny stem). Soldiers. Hedge-peak. Dog-thorn. Horse-bramble. Bird-brier. Bedeguar. June-July.

Rosa virginiàna Mill. Low or Pasture Rose.



Rosa virginiana Mill. Gard. Dict. Ed. 8, no. 10. 1768. Rosa humilis Marsh. Arb. Am. 136. 1785. Rosa parviflora Ehrh. Beitr. 4: 21. 1789. Rosa lucida Ehrh. Beitr. 4: 22. 1789. Rosa humilis lucida Best, Bull. Torr. Club 14: 256.

Bushy, 6'-6° high, usually armed with slender or stout, straight or curved infrastipular spines, and more or less prickly. Stipules entire; leaflets usually 5, sometimes 7, rather thin, ovate-oval or obovate, dull or somewhat shining, coarsely and simply serrate, 6"-2' long, mostly acute or acutish at each end, short-stalked or sessile, glabrous or pubescent beneath; flowers usually few or solitary, 2'-3' broad; pedicels and calyx usually glandular; calyx-lobes lanceolate, acuminate, or dilated above, commonly lobed, spreading and deciduous; petals obovate, obcordate or sometimes lobed; styles distinct; fruit globose or depressedglobose, glandular-hispid, about 4" high.

In dry or rocky soil, Newfoundland to Ontario, Wisconsin, Missouri, Georgia and Louisiana. Our commonest wild rose, consisting of many slightly differing races, northern ones with stouter spines than southern. A double-flowered form occurs in Pennsylvania and New Jersey. Dwarf wild rose. May-

Rosa Woodsii Lindl. Woods' Rose.

Rosa Woodsii Lindl. Mon. Ros. 21. 1820. Rosa Fendleri Crepin, Bull. Soc. Bot. Belg. 15: 91. 1876.

Low, bushy, 1°-3° high, armed with slender mostly straight spines, or naked above. Infrastipular spines commonly present; stipules rather broad, entire; leaflets 5-9, oval or obovate, short-stalked or sessile, obtusish at the apex, narrowed or cuneate at the base, 5"-18" long, simply and sharply serrate, somewhat glaucous beneath; flowers 1'-2' broad, corymbose or solitary, short-pedicelled; sepals lanceolate, acuminate, laterally lobed or entire, erect and persistent on the fruit; styles distinct; fruit globose or globose-ovoid, 4"-5" in diameter, glabrous, sometimes glaucous.

Prairies, Minnesota to Missouri, the Northwest Territory, New Mexico and Colorado. June-July.



Rubus alleghaniénsis Porter. Mountain Blackberry.

Rubus villosus var. montanus Porter, Bull. Torr. Club 17: 15. 1890.

Rubus montanus Porter, Bull. Torr. Club 21:

120. 1894. Not Ort. 1852. Rubus alleghaniensis Porter, Bull. Torr. Club 23:

R. nigrobaccus Bailey, Sk. Ev. Nat. Fr. 379, f. 59, 60. 1898.

Stems reddish or purple, very prickly, erect, arching or ascending, 2°-8° high. Leaflets ovate to ovate-lanceolate, acute or acuminate, pubescent, at least beneath, the inflorescence more or less glandular-hispid; flowers several in rather loose racemes; fruit oblong, oblong-conic or thimble-shaped, 8"-14" long, 3"-4" in diameter; racemes sometimes very long; drupelets oblong when dry, rarely yellowish.

In dry soil, Nova Scotia to Ontario, New York, Virginia and North Carolina. May-July. Fruit ripe Aug.-Sept. High-bush blackberry.

Rubus idaeus var. strigosus (Michx.) Maxim.

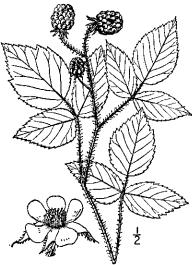
Rubus strigosus Michx. Fl. Bor. Am. 1: 297. 1803. Rubus idaeus var. strigosus Maxim. Bull. Acad. St. Petersb. 17: 161. 187

Stems shrubby, biennial, branched, 3°-6° high, usually densely clothed with weak glandular bristles, or the older stems with small hooked prickles. Stipules narrow, deciduous; leaves petioled, pinnately 3-5-foliolate, rarely simple and 3-lobed; leaflets ovate or ovate-oblong, acuminate, sharply and irregularly serrate or slightly lobed, rounded at the base, 1'-3' long, whitish-pubescent beneath; inflorescence terminal and axillary, racemose or paniculate, loose; pedicels slender, curving in fruit; flowers 4"-6" broad; petals white, ascending, about equalling the spreading acuminate, mostly hispid, velvety sepals; fruit elongated-hemispheric, light red, rarely

In dry or rocky situations, Newfoundland and Labrador to British Columbia, south in the Alleghanies to North Carolina, and in the Rocky Mountains to New Mexico. Ascends to 5500 ft. in North Carolina. The original of the Cuthbert and Hansall raspberries. Mulberry. May-July. Fruit ripe July-Sept.

Northern races closely resemble the Old World Rubus idaeus L.

Wild Red Raspberry.

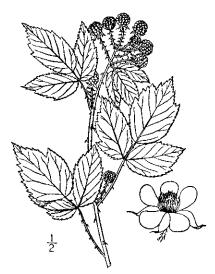


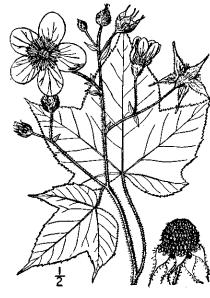
Rubus occidentàlis L. Black Raspberry. Thimble-berry.

Rubus occidentalis L. Sp. Pl. 493. 1753. Rubus idaeus var. americanus Torr. Ann. Lyc. N. Y. 2: 196. 1825.

Very glaucous, stems cane-like, recurved, often rooting at the tip, sometimes 10°-12° long, sparingly armed with small hooked prickles, rarely slightly glandular-bristly above. Stipules setaceous, deciduous; leaves pinnately 3-foliolate (rarely 5-foliolate); leaflets ovate, acuminate, coarsely incised-serrate, very white-pubescent beneath; flowers as in the preceding species; inflorescence corymbose, compact, usually only terminal; pedicels short, ascending or erect in fruit; fruit purple-black (rarely yellow), depressed-hemispheric.

New Brunswick to Quebec, Ontario, Georgia and Missouri. Ascends to 3000 ft, in Virginia. The original of the Gregg, Hilborn and other raspberries. May-June. Fruit ripe July. Called also scotch-cap and black-cap. Purple raspberry. Black-berry.





Rubus odoràtus L. Purple-flowering Raspberry. Thimble-berry.

Rubus odoratus L. Sp. Pl. 494. 1753.

Erect, branched, shrubby, glandular-pubescent and somewhat bristly, not prickly, 3°-5° high. Stipules small, lanceolate, acuminate; leaves simple, petioled, large (sometimes nearly 1° broad), 3-5-lobed, cordate at the base, pubescent, especially on the veins of the lower surfaces, the lobes acuminate, finely serrate, the middle one longer than the others; flowers terminal, rather numerous, corymbose or paniculate, purple (rarely white), showy, 1'-2' broad; bracts membranous; calyx-lobes tipped with a long slender appendage; fruit red when ripe, depressed-hemispheric, scarcely edible.

In rocky woods, Nova Scotia to Ontario and Michigan, south to Georgia and Tennessee. June-Aug. Scotch caps. Mulberry. Rose-flowering or Canadian raspberry. In England called Virginia raspberry.

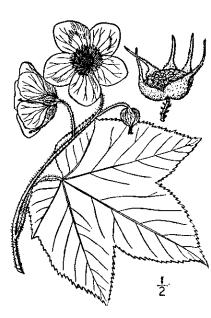
Rubus parviflòrus Nutt. Salmon-berry. White-flowering Raspberry.

Rubus parviflorus Nutt. Gen. 1: 308. 1818.

Rubus nutkanus Mocino; DC. Prodr. 2: 566. 1825.

Similar to the preceding species but usually less glandular and scarcely bristly. Leaves petioled, simple, cordate at the base, 3-5-lobed, the lobes acute or obtusish, rarely acuminate, the middle one equalling or but slightly longer than the others, all coarsely and unequally serrate; flowers few, corymbose, white, terminal, 1'-2' broad; calyx-lobes tipped with a long, slender appendage; fruit depressed-hemispheric, scarcely edible, red when ripe.

In woods, Michigan, Minnesota and western Ontario to Alaska and California, south in the Rocky Mountains to Utah and Colorado. Thimble-berry. May-July.

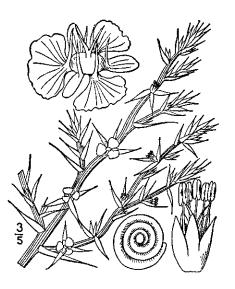


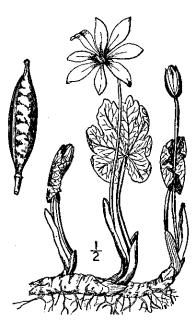
Salsola Kàli L. Saltwort. Prickly Glasswort. Fig. 1713.

Salsola Kali L. Sp. Pl. 222. 1753. Salsola Tragus L. Sp. Pl. Ed. 2, 322. 1762. Salsola caroliniana Walt, Fl. Car. 111. 1788.

Annual, glabrous or often pubescent, loosely much branched, 1°-2° high, the branches ascending or spreading, mostly stout, somewhat ridged. Leaves dull green or grayish, 3″-10″ long, succulent, lanceolate-subulate, swollen at the base, the midvein excurrent into a stout yellowish green prickle; flowers solitary in the axils; wing of the persistent calyx nearly orbicular, lobed, becoming lacerate, not conspicuously veined, 2″-4″ in diameter; calyx coriaceous, veined, its wing about as long as the ascending lobe.

On sea beaches, Cape Breton Island to Florida. Also in Europe and Asia. Sea- or Salt-grape. Seathrift. Russian thistle. Kelpwort. July-Sept.



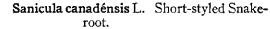


Sanguinaria canadénsis L. Bloodroot. Puccoon-root. Tetterwort.

Sanguinaria canadensis L. Sp. Pl. 505. 1753.

Glabrous, glaucous, especially when young. Rootstock ½'-1' thick, several inches long, densely clothed with thick fibrous roots; petioles 6'-14' long; leaves 6'-12' broad, 4'-7' long, palmately 5-9-lobed, the lobes repand, or cleft at the apex; flowering scape at length overtopped by the leaves; flower 1'-1½' broad; petals early deciduous; capsule narrow, 1-celled, 2-valved, 1' long.

In rich woods, Nova Scotia to Manitoba and Nebraska, south to Florida, Alabama and Arkansas. Ascends to 2500 ft. in Virginia. Also called red puccoon and red Indianpaint. Turmeric. Redroot, Corn-root. Pauson. Sweetslumber. White puccoon. Snake-bite. Flower sometimes pinkish. The scape rarely bears 2 or 3 flowers and bracts. April-May. The species consists of several races, differing in the leaf-lobing and in size and form of the capsule.

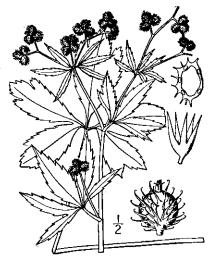


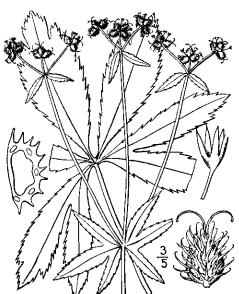
Sanicula canadensis L. Sp. Pl. 235. 1753. S. marylandica var. canadensis Torr. Fl. U. S. 302. 1824.

Rather dull green, 1°-4° high, widely branched, the branches forked, the umbellate fruit-bearing rays only 1"-5" long. Stem leafy; leaves petioled, 3-5-divided; segments cuneate-obovate to narrowly oblong, acute, mucronate-serrate, or incised, often small, but sometimes 3½' long; involucral leaves small, those of the involucels bract-like; staminate flowers few, on pedicels 1" long or less; calyx ½" long, parted into linear-lanceolate acute lobes which exceed the minute white petals; fruit short-stipitate, subglobose, 1"-2½" long; the bristles slender; styles short, included; oil-tubes 5; seed dorsally furrowed.

In dry woodlands, New Hampshire to Florida, South Dakota and Texas. June-Aug.

Sanicula Smallii Dicknell, with yellowish or greenish petals, the styles about as long as the calyx-segments, is a related southern plant, ranging north to Missouri and North Carolina.





Sanicula marylándica L. Black Snake-root or Sanicle.

Sanicula marylandica L. Sp. Pl. 235. 1753.

Rather stout, 1½°-4° high, usually simple, topped by a 2-4-rayed umbel. Leaves firm, bluish green, the basal long-petioled, the upper sessile, 5-7-parted; segments 1½′-6′ long, obovate to oblanceolate, irregularly serrate or dentate, often incised; involucral leaves much smaller, 3-cleft; involucel-bracts small, rarely I" long; pedicels of staminate flowers 2" long; calyx I" long, parted into subulate segments; petals greenish white, little exceeding the calyx; anthers greenish white; fruit sessile, ovoid, 3" long, the slender recurved styles longer than the stout bristles; oil-tubes 5, large; seed furrowed dorsally.

In rich woods, Newfoundland to Alberta, Georgia and Colorado, May-July.

Sapindus saponaria var. drummondii (Hook. & Arn.) L. Benson Drummond's Soapberry. Wild China-tree. Indian Soap-plant.

S. Drummondii H. & A. Bot. Beechey's Voy. 281. 1841. Sapindus acuminatus Raf. New Flora N. A. 3: 22. 1836.

A tree, with maximum height of about 50° and trunk diameter of 2°, the bark fissured when old. Leaves pinnate, glabrous above, sparingly pubescent beneath, 5′-18′ long; leaflets 7-19, inequilateral, obliquely lanceolate, often falcate, entire, 12′-4′ long, acuminate at the apex and commonly acute at the base; rachis not winged; panicles terminal, 5′-8′ long, dense; flowers white, about 2″ broad; petals ovate; berry globose or oval, 4″-7″ in diameter, very saponaceous, usually 1-seeded and with 2 abortive ovules at its base.

River valleys and hillsides, Missouri to Louisiana, Kansas, Texas, Arizona and northern Mexico. Wood hard, light yellowish brown; weight per cubic foot 59 lbs; used in Texas for cotton baskets. Berries used as a substitute for soap. Included, in our first edition, in the description of Sapindus marginatus Willd., of the Southeastern States, which differs in haring lanceolate petals. May-June.



Saponaria officinàlis L. Soapwort. Bouncing Bet. London Pride. Bruise-wort.

Saponaria officinalis L. Sp. Pl. 408. 1753.

Perennial, glabrous, erect, stout, sparingly branched, leafy, 1°-2° high. Leaves ovate or oval, 2'-3' long, about 1' wide, strongly 3-5-ribbed, acute, narrowed at the base into a broad short petiole; flowers pink or whitish, about 1' broad, in dense terminal corymbs, with numerous small lanceolate bracts or floral leaves; calyx tubular, 8"-10" long, faintly nerved, 5-toothed; petals obcordate with a scale at the base of the blade; pod narrowly oblong, shorter than the calyx.

Roadsides and waste places, common in most districts and escaped from gardens, spreading by underground stolons. Naturalized from Europe. Flowers sometimes double. Summer Called also Fuller's-herb. Boston-, chimney-, hedge- or old-maid's-pink. Sheepweed. Soap-root. Soapwort-gentian. World's-wonder. Sweet-betty. Wild sweet-william. Lady-by-the-gate, Wood's-phlox. Mock-gilliflower.



Sarcobatus vermiculàtus (Hook.) Torr. Grease-wood.

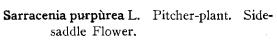
Batis (?) vermiculata Hook. Fl. Bor. Am. 2: 128. 1838.

Sarcobatus vermicularis Torr. Emory's Rep. 150. 1848.

Glabrous or the young foliage somewhat pubescent, much branched, 2°-10° high, the branches slightly angled, leafy, nearly white, some of them leafless and spine-like. Stem 1'-3' in diameter; wood yellow, very hard; leaves obtuse or subacute, ½'-1½' long, 1"-1½" wide, narrowed at the base; spikes of staminate flowers ½'-1' long, 1½"-2" in diameter, cylindric, short-peduncled or sessile; wing of the calyx 4"-6" broad when mature, conspicuously veined.

In dry alkaline and saline soil, western Nebraska, Wyoming to Nevada and New Mexico. Wood used for fuel, for want of better, in the regions where it occurs. June-July. Fruit mature Sept.-Oct.





Sarrecenia purpurea L. Sp. Pl. 510. 1753.

Sarracenia purpurea heterophylla (Eaton) Torr. Fl. N. Y. 1: 41. 1843.

Sarracenia heterophylla Eaton, Man. Ed. 3, 447. 1822.

Glabrous, except the inner side of the lamina and inner surface of the pitchers, which are densely clothed with stiff reflexed hairs. Leaves tufted, ascending, curved, 4'-12' long, purple-veined, or sometimes green or yellowish all over, much inflated, narrowed into a petiole below, broadly winged, persistent; scapes 1°-2° high, slender, bearing a single nodding, deep purple or occasionally yellow, nearly globose flower 2' in diameter or more; petals obovate, narrowed in the middle, incurved over the yellowish style.

In peat bogs, Labrador to the Canadian Rocky-Mountains, Florida, Kentucky and Iowa. May-June. The hollow leaves are commonly more or less completely filled with water containing drowned insects. Young plants often bear several smaller flat obliquely ovate leaves. Huntsman's-cup. Indian cup or pitcher. Adam's- or forefathers'-cup or -pitcher. Whippoorwill's-boots or -shoes. Skunk-cabbage. Watches, Foxglove, Small-pox plant. Fly-trap. Meadow- or fever-cup.

Sassafras albidum (Nutt.) Nees

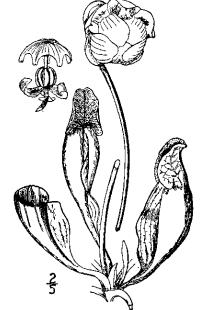
Sassafras or Ague Tree.

Laurus Sassafras L. Sp. Pl. 371. 1753. Sassafras officinale Nees & Eberm. Handb. Med. Pharm. Bot. 2: 418. 1831. Sassafras Sassafras Karst. Deutsch. Fl. 505. 1880-83. S. variifolium Kuntze, Rev. Gen. Pl. 574. 1891.

A tree sometimes 125° high, the trunk 7° in maximum diameter; the bark rough in irregular ridges, aromatic, the young shoots yellowish-green, the twigs and leaves mucilaginous, pubescent when young but becoming glabrous. Leaves oval and entire or mitten-shaped, or 3-lobed to about the middle and often as wide as long, pinnately veined, petioled; petioles 1' long or less; racemes several or numerous in the umbels, peduncled; flowers about 3" broad; stamens about equalling the calyx-segments; fruiting pedicels red, much thickened below the calyx; drupe nearly ½' high.

In dry or sandy soil, Maine to Ontario, Michigan, Iowa, Florida and Texas. Root largely used for the aromatic oil. Wood soft, weak, durable, brittle; color dull orange; weight 31 lbs. per cubic foot. April—May. Fruit ripe July-Aug. Cinnamon-wood. Smelling-stick. Saloop.





Saxifraga pensylvanica L.

Pennsylvania or Swamp Saxifrage.

S. pennsylvanica L. Sp. Pl. 399. 1753. Saxifraga Forbesii Vasey, Am. Entom. & Bot. 2: 288. 1870.

M. pennsylvanica Haw. Saxifr. Enum. 45. 1821. Scape stout, terete, viscid-pubescent, 1°-3½° high, bracted at the inflorescence. Leaves large, oval, ovate, obovate or oblanceolate, pubescent or glabrate, 4'-10' long, 1½'-3' wide, obtuse at the apex, narrowed at the base into a broad petiole, the margins denticulate or repand; cymes in an elongated open panicle; flowers greenish, regular, 1½"-2½" broad; calyx-tube nearly free from the ovary, its lobes ovate, obtusish, reflexed, one-half shorter than the lanceolate or linear-lanceolate petals; filaments subulate or filiform; follicles ovoid, their tips divergent when mature.

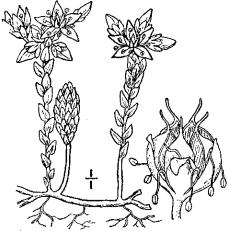
Swamps and wet banks, Maine to Ontario, Minnesota, Virginia, Iowa and Missouri. May.



Sedum àcre L Wall-pepper. Biting or Mossy Stonecrop.

Sedum acre L. Sp. Pl. 432. 1753.

Perennial, densely tufted, spreading and matted, glabrous; sterile branches prostrate, the flowering ones erect or ascending, 1'-3' high. Leaves sessile, alternate, ovate, very thick, densely imbricated, light yellowish green, entire, about 1½" long, those of the sterile branches usually arranged in 6 rows; cyme 2-3-forked, its branches ½'-1' long; flowers sessile, about 4" broad; petals bright yellow, linear-lanceolate, acute, 3 or 4 times as long as the ovate sepals; central flower of the cyme commonly 5-parted, the others usually 4-parted; follicles spreading, 1½"-2" long, tipped with a slender style.



On rocks and along roadsides, escaped from cultivation, Nova Scotia to Ontario, southern New York and Virginia. Adventive from Europe. Native also in northern Asia. Also called bird's-bread. Creeping Jack or Charlie. Pricket. Golden-moss. Little houseleek. Gold-chain. Wall-moss. Tangle-tail. Rock-plant. Pepper-crop. Mountain-moss. Ginger. Poor-man's pepper. Prick-madam. Treasure-of-love. Love-entangled. June-Aug.

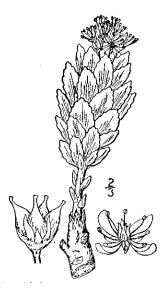
Sedum rosea (L.) Scop.

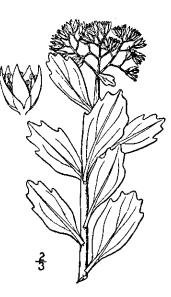
Roseroot, Rosewort.

Rhodiola rosea L. Sp. Pl. 1035. 1753. Sedum roseum Scop. Fl. Carn. Ed. 2, 326. 1772. Sedum Rhodiola DC. Plantes Gras. pl. 143. 1805.

Perennial, branched at the base, or simple, erect or ascending, glabrous and somewhat glaucous, 4'-12' high. Leaves sessile, oval or slightly obovate, acute or obtuse at the apex, narrowed or rounded at the base, dentate or entire, 6"-12" long, 3"-5" wide, the lower ones smaller; cyme terminal, dense, ½"-2' broad; flowers dioecious, yellowish-green or purplish, 2½"-4" broad; sepals oblong, narrower and shorter than the petals; staminate flowers with 8 (rarely 10) stamens, the pistillate ones with 4 (rarely 5) carpels; follicles purple, about 2" long, only their tips spreading.

In rocky places, Labrador and arctic America to Maine and Vermont; Chittenango Falls, New York; cliffs on the Delaware River in eastern Pennsylvania. Northern and alpine Europe and Asia. Root rose-scented. Snowdon rosc. May-July.





Sedum telephioides Michx. American Orpine. Wild Live-forever.

Sedium telephioides Michx. Fl. Bor. Am. 1: 277. 1803.

Similar to the preceding species, but more slender, seldom over 10' high, very glaucous and purplish throughout. Leaves oval or obovate, obtuse, coarsely dentate or entire, 1'-2' long, all narrowed at the base and petioled or the uppermost sessile; cyme dense, regular, 2'-4' broad; flowers perfect, 3"-4" broad, 5-parted; petals pale pink, much longer than the lanceolate sepals; follicles about 2" long, tipped with a slender style.

On dry rocks, southern Pennsylvania and Maryland to western New York and southern Indiana, south to North Carolina and Georgia. Reported from farther north. Ascends to 4200 ft. in North Carolina. Sweet-heart. Aug.-Sept.

Sedum Siebóldi Sweet, an Asiatic species commonly cultivated, is occasionally found as an escape; its leaves are nearly orbicular and mostly whorled in 3's.

Sedum ternàtum Michx. Wild Stonecrop.



S. ternatum Michx, Fl. Bor. Am. 1: 277. 1803.

Perennial by rootstocks, tufted, stem creeping, flowering branches ascending, 3'-8' high. Lower leaves and those of the sterile shoots flat, obovate, entire, 6"-12" long, sometimes 9" wide, rounded at the apex, cuneate at the base or narrowed into a petiole, verticillate in 3's; upper leaves oblanceolate or oblong, alternate, sessile; cyme 2-4-forked, its branches spreading or recurved in flower; flowers rather distant, often leafy-bracted, about 5" broad; petals linear-lanceolate, acute, white, nearly twice the length of the oblong obtuse sepals; follicles 23" long, tipped with the slender style.

On rocks, Connecticut to New Jersey, Georgia, west to Indiana, Missouri, Tennessee and Michigan. Also escaped from gardens to roadsides in the Middle and Eastern States. Ascends to 3000 ft. in Virginia. lceland-moss. Three-leaved stonccrop. April-June.

Sempervivum tectòrum L. Houseleek.

Sempervivum tectorum L. Sp. Pl. 464. 1753.

Flowering stems about 1° high, the barren shoots forming lateral nearly globular tufts. Leaves oval or ovate, the lower I'-1½' long, very thick, short-pointed, bordered by a line of stiff short hairs; cyme large, dense; flowers sometimes I' broad, pink, sessile along its spreading or recurved branches; petals lanceolate, acute, 2 to 3 times as long as the obtuse ciliate sepals.

Essex Co., Mass., escaped from gardens and reported as well established; Somerset Co., N. J. Native of continental Europe. Summer, Healing-blade. Aye-green. Bullock's-eye. Poor Jan'sleaf. Jupiter's-beard. Hen-and-chickens. Old English names, homewort, sengreen and thunder-plant; a fancied protection against lightning, as well as fire.



Shepherdia argentea (Pursh) Nutt.

Buffalo-berry. Rabbit-berry.

Elaeagnus argentea Nutt. Fraser's Cat. 1813. Hippophaë argentea Pursh, Fl. Am. Sept. 115. Shepherdia argentea Nutt. Gen. 2: 241, 1818.

L. argentea Greene, Pittonia 2: 122, 1890,

A shrub, 4°-18° high, the twigs often terminating in thorns. Leaves oblong, or sometimes oblong-lanceolate, I'-2' long, rarely more than ½ wide, obtuse at the apex, usually cuneate-narrowed at the base, densely silvery-scurfy on both sides: petioles 2"-6" long; flowers fascicled at the nodes, the globose buds very silvery: fruit oval, or ovoid, scarlet, sour, 2"-3" long, edible.

Minnesota to Manitoba, Saskatchewan, Kansas and Nevada. April-May. Called also beef-suet tree, silver leaf. Wild oleaster- or olive-tree. Bull-berry. Fruit ripe July-Aug.



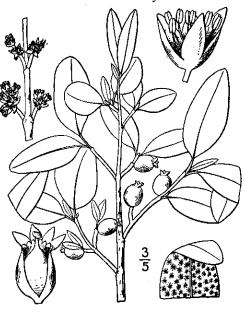
Shepherdia canadensis (L.) Nutt.

Elaeagnus canadensis L. Sp. Pl. 1024. 1753. Shepherdia canadensis Nutt. Gen. 2: 240. 1818. L. canadensis Greene, Pittonia 2: 122. 1800.

A thornless shrub, 4°-8° high, the young shoots brown-scurfy. Leaves ovate or oval, obtuse at the apex, rounded, or some of them narrowed at the base, I'-I' long, green and sparingly stellate-scurfy above, densely silvery stellate-scurfy beneath, some of the scurf usually brown; petioles 2"-3" long; flowers in short spikes at the nodes of the twigs, yellowish; buds globose, less than I" in diameter, forming in summer, expanding with or before the leaves early in the following spring; perianth about 2" broad when expanded; fruit oval, red or yellowish, 2"-3" long, the flesh insipid, the nut smooth.

On banks, especially along streams, Newfoundland to Alaska, British Columbia, Maine, New York, Wisconsin and New Mexico. Wild oleaster- or olive-tree. Soopoo-lalia (Indian). April-June. Fruit ripe July-Aug.

Canadian Buffalo-berry.



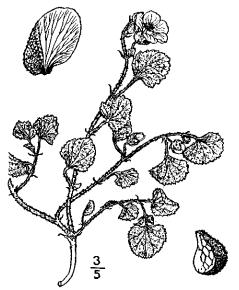
Sida hederàcea Torr. Round-leaved Sida.

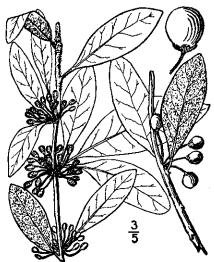
Sida hederacea Torr.; A Gray, Mem. Am. Acad. 4: 23. 1849.

Malva hederacea Dougl.; Hook. Fl. Bor. Am. 1:

Perennial, decumbent, densely stellate-canescent. Leaves reniform to broadly ovate. inequilateral, 2' wide or less; flowers solitary or few together in the axils, the peduncles recurved in fruit; petals white or yellowish; calyx 5-angled, its lobes ovate-lanceolate, acuminate; fruit short, conic, of 6 to 10 carpels.

In moist, often saline soil, Kansas to Texas, Mexico, Wyoming, Washington and California.





Sideroxylon lanuginosum Michx.

Woolly Buckthorn.

Sideroxylon lanuginosum Michx, Fl. Bor. Am. 1: 122. 1803. Bumelia lanuginosa Pers. Syn. 1: 237. 1805.

A shrub or tree, sometimes reaching a height of 60° and a trunk diameter of 3°, the twigs usually spiny. Leaves persistent, rather coriaceous, glabrous above, densely tomentose-pubescent beneath, oblanceolate, obovate or oblong, usually obtuse at the apex, narrowed or cuneate at the base, 1½'-3' long, ½'-1' wide; petioles 2"-6" long; flowers 3-18 in the fascicles, about 1½" broad; pedicels tomentose, longer than the petioles; calyx-segments ovate, tomentose, obtusish; staminodia ovate, obscurely toothed; berry oval or globose, black, 4"-5" long.

In woods and thickets, Illinois to Kansas, Georgia, Florida and Texas. Wood soft, weak, yellowish-brown; weight per cubic foot 41 lbs. Shittim-wood. Black haw. Gum-elastic. June-July.

Sideroxylon lycioides L. Southern or Carolina Buckthorn. Sideroxylon lycioides L. Sp. Pl. Ed. 2, 279. 1762. Bumelia lycioides Pers. Syn. 1: 237. 1805.

A shrub or small tree with maximum height of about 40° and trunk diameter of about 6′, the bark gray, the twigs commonly spiny. Leaves rather firm, tardily deciduous, glabrous on both sides; finely reticulate-veined, oblong, elliptic, or oblanceolate, acute or acuminate at both ends, rarely obtuse at the apex, 2′-5′ long, ½-1½′ wide; petioles 2″-6″ long; flowers about 1½″ broad, numerous in the dense axillary clusters; pedicels about the length of the petioles, glabrous; calyx-segments obtuse, glabrous; staminodia ovate, boat-shaped, entire; berry subglobose, black, 4″-5″ long.

In moist thickets, Virginia to Illinois and Missouri, south to Florida and Texas. Wood hard, yellowish-brown; weight about 46 lbs. per cubic foot. Bumelia. Iron- or chittim-wood. Mock orange. Coma. June-Aug.



Silene acàulis L. Moss Campion.

Silene acaulis L. Sp. Pl. Ed. 2, 603. 1762.

Perennial, puberulent or glabrous, branched, densely tufted, 1'-3' high. Leaves sessile, crowded, linear, 4''-6'' long, about $\frac{1}{2}''$ wide, obtuse or acutish at the apex, the margins ciliate-serrulate; flowers solitary at the ends of the branches, sessile or slender-peduncled, 4''-6'' broad, purple or purplish, rarely white; calyx campanulate, glabrous, 4'' high; petals entire or emarginate, with a scale at the base of the blade; pod oblong, equalling or exceeding the calyx.

Summits of the White Mountains, N. H.; Gaspé, Quebec; Cape Breton Island, Labrador and throughout arctic America, south in the higher Rocky Mountains to Arizona. Also in arctic and alpine Europe and Asia. Cushion- or moss-pink. Summer.



Silene latifòlia (Mill.) Britten & Rendle. Bladder Campion.



Cucubalus Behen L. Sp. Pl. 414. 1753. Not Silene Behen L.

Cucubalus latifolius Mill. Gard. Dict. Ed. 8, no. 2. 1768.

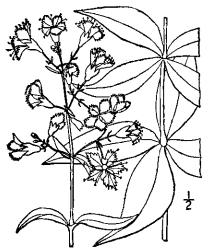
Behen vulgaris Moench, Meth. 709. 1794. S. vulgaris Garcke, Fl. Deutsch. Ed. 9, 64. 1869. Silene inflata J. E. Smith, Fl. Brit. 2: 292. 1800. S. latifolia Britten & Rendle, List Brit. Seed-Plants

latifolia Britten & Rendle, List Brit. Seed-Plants 5. 1907.

Perennial, branched from the base, glaucous and glabrous, or rarely pubescent, 6'-18' high. Leaves opposite, ovate-lanceolate or oblong, acute, variable in size, the lower often spatulate; flowers white, 6"-10" broad, in loose cymose panicles, often drooping; calyx at first tubular-campanulate, at length inflated and globose, 4"-6" long, strongly veined; petals 2-cleft, with or without a small crown.

In meadows and waste places, New Brunswick to Ontario, Washington, New Jersey and Missouri. Also on the Pacific Coast. Naturalized from Europe and native also of Asia. Summer. Called also Behen, White Ben, Cow-bell, Spattling or Frothy poppy. Bull-rattle, Rattle-bags, Devil's rattle-box. Snappers. Knap-bottle. Bird's-eggs. Sea-pink. Maiden's-tears.

Silene stellàta (L.) Ait. Starry Campion. Thermon Snake-root.



Cucubalus stellatus L. Sp. Pl. 414. 1753. Silene stellata Ait. f. Hort. Kew. 3: 84. 1811.

Perennial, erect, 2°-3½° high, densely and minutely rough-pubescent throughout. Leaves ovatelanceolate, acuminate, 2'-4' long, ½'-1' wide, verticillate in 4's or the lowest opposite, their margins finely ciliate; flowers white, 7"-10" broad, in panicled cymes, forming a large showy inflorescence; calyx campanulate, inflated, 7"-8" high, its teeth triangular, acute; petals crownless, fimbriate, about equalling the stamens; pod globose-ovoid, about the length of the calyx.

In woods, Massachusetts to Minnesota, Nebraska, Georgia and Arkansas. June-Aug.

Silene ovata Pursh, which has the habit of this species but the leaves opposite, is recorded by Pursh from "the western parts of Virginia and Carolina," but is not definitely known from Virginia.



Sinapis arvénsis L. Charlock. Wild Mustard.

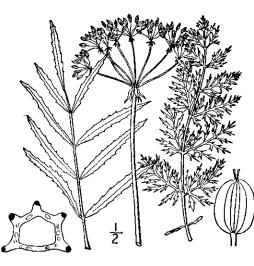
Sinapis arvensis L. Sp. Pl. 668. 1753.

Brassica Sinapistrum Boiss. Voy. Espagne 2: 39. 1839-45.

Brassica arvensis B.S.P. Prel. Cat. N. Y. 1888.

Erect, annual, 1°-2° high, hispid with scattered stiff hairs, or glabrate, branching above. Leaves variously irregularly toothed or lobed; flowers 6"-8" broad; pedicels stout, 2"-3" long in fruit; pods glabrous or slightly bristly, spreading or ascending, somewhat constricted between the seeds, 6"-8" long, 1" wide, tipped with a flattened elongated-conic often 1-seeded beak 5"-6" long, the valves strongly nerved

In fields and waste places, frequent. Adventive from Europe and widely distributed as a weed. Corn-mustard, chadlock, corn- or field-kale. Kedlock. Kerlock or curlock. Bastard-rocket. Runch-, crowd- or kraut-weed. Yellow-flower. Water-cress. May-Nov.



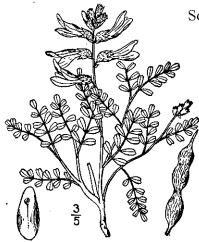
Sium suave Walt. Hemlock Water-Parsnip.

Sium cicutaefolium Schrank, Bair. Fl. 1: 558.

S. lineare Michx. Fl. Bor. Am. 1: 167. 1803.
Sium latifolium of American authors, not of Linn.

Erect, stout, branched, 2°-6° high. Lower leaves long-petioled, the uppermost nearly sessile; petioles sheathing at the base; leaf-segments 7-17, linear, or lanceolate, 1½-5′ long, 1½'-12″ wide, acuminate at the apex, sharply serrate, or the lowermost pectinately dissected; umbels 2′-3′ broad, 8-20-rayed; rays ½'-1½' long; fruit ovate, compressed, about 1½" long, the ribs prominent.

In swamps, Nova Scotia to British Columbia, south to Florida, Louisiana and California. Very variable in leaf-form. July-Oct.



Sophora nuttalliana B.L. Turner

Silky Sophora.

Sophora sericea Nutt. Gen. 1: 280. 1818.

Herbaceous, woody at the base, erect or ascending, branched, silky or silvery pubescent with appressed hairs, 6'-12' high. Stipules subulate, deciduous; leaves short-petioled; leaflets 7-25, short-stalked, obovate or elliptic, obtuse or emarginate at the apex, narrowed or cuneate at the base, 3"-6" long; raceme peduncled, rather loosely flowered, 2'-4' long; flowers white, about 8" long, nearly sessile; pod dry, coriaceous, 1'-2' long, about 2" thick, pubescent, few-seeded.

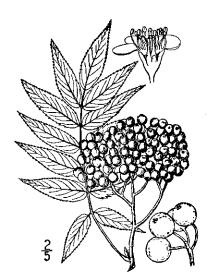
Plains and prairies, South Dakota, Nebraska and Wyoming to Texas, Arizona and Mexico. April-June.

Sorbus americàna Marsh. American Mountain Ash. Dogberry.

Sorbus americana Marsh. Arb. Am. 145. 1785. Sorbus microcarpa Pursh, Fl. Am. Sept. 341. 1814. Pyrus americana DC. Prodt. 2: 637. 1825.

A small tree, with smooth bark, reaching a maximum height of 30° and a trunk diameter of 18′. Leaf-buds acute; leaves petioled; leaflets 11–17, lanceolate, long-acuminate, glabrous on both sides or slightly pubescent when young, bright green above, generally paler beneath, 1½-4′ long, sharply serrate with mucronate teeth; cymes densely compound, 3′-6′ broad; flowers 2″-3″ broad; fruit globose, bright red, 2″-3″ in diameter.

In low woods or moist ground, Newfoundland to Manitoba, south, especially along the mountains, to North Carolina and to Michigan. Wood soft, light brown; weight per cubic foot 34 lbs. American rowan- or service-tree. Witch- or round-wood. Round- or wine-tree. Elderleaved mountain-ash or -sumach. Moose-missy. Misseymoosey. Indian-mozamize. Life-of-man. A closely related form occurs in Japan. May-June.



Sphaeralcea angustifolia (Cav.) G. Don Sharp-fruited Globe-Mallow.

Sida stellata Torr. Ann. Lyc. N. Y. 2: 171. 1827. Not Cav. 1802.

Sphaeralcea stellata T. & G Fl. N. A. 1: 228. 1838. Sphaeralcea angustifolia var. cuspidata A. Gray, Proc. Am. Acad. 22: 203. 1887.

Sphaeralcea cuspidata Britton, in Britt. & Brown, Ill. Fl. 3: 519 1898.

Perennial, densely stellate-canescent; stems rather stout, simple, or somewhat branched, leafy, 1°-4° high. Leaves lanceolate, linear-lanceolate, or oblong-lanceolate, obtuse, or acutish, firm, crenulate, the lower with petioles as long as the blade, the others short-petioled, the larger 2'-4' long, 4'-1' wide, sometimes hastately lobed toward the base; flowers red, 6"-10" broad, clustered in the axils, short-pedicelled; carpels 1-3-seeded, cuspidate, the tip often deciduous, wrinkled on the sides, stellate-canescent, or glabrate.

Kansas to Texas, Colorado, Arizona and Mexico. April-Aug.



Sphaeralcea coccinea (Nutt.) Rydb.

Red False Mallow.

Malva coccinea Nutt. in Fraser's Cat. Name only. 1813. Cristaria coccinea Pursh, Fl. Am. Sept. 454. 1814. M. coccineum A. Gray, Mem. Am. Acad. (II.) 4: 21. 1848.

Perennial, erect or ascending, 4'-10' high, freely branched, densely and silvery stellate-pubescent. Lower leaves 1'-2' wide, ovate-orbicular in outline, slender-petioled, the uppermost nearly sessile, all pedately 3-5-parted; lobes cuneate to linear, incised, mainly obtuse; flowers red, 6"-9" broad, in dense short terminal spicate racemes; bractlets of the involucels commonly none; petals much longer than the lanceolate acutish calyx-lobes; carpels 10-15, rugose-reticulated, indehiscent, 1-seeded (rarely 2-seeded).

Prairies and plains, Iowa to North Dakota, Manitoba, Nebraska, Texas, British Columbia and New Mexico. Prairie-mallow. Moss-rose. May-Aug.

Spigelia marylándica L. Indian or Carolina Pink.

Lonicera marylandica L. Sp. Pl. 175. 1753. Spigelia marylandica L. Syst. Ed. 12, 734. 1767.

Perennial, stem 4-angled, glabrous or very nearly so, simple, or branched at the base, erect, 1°-2° high. Leaves sessile, ovate, or ovate-lanceolate, acute or acuminate at the apex, rounded or narrowed at the base, 2'-4' long, ½-2' wide, sparingly pubescent on the veins beneath; flowers in a solitary (rarely 2 or 3) terminal 1-sided peduncled spike; corolla scarlet outside, yellow within, 1'-2' long, narrowed below, its lobes lanceolate, about 3" long; calyx-segments subulate, as long as the corolla-lobes or shorter; style jointed below the middle, exserted or included.

In woods, North Carolina to Kentucky, Ohio, Wisconsin (?), Missouri, Florida and Texas. Erroneously recorded from New Jersey. May-July. Pink-root, Wormgrass. Star-bloom.





Spiraea álba DuRoi. Narrow-leaved Meadow-sweet.

S. alba DuRoi, Harbk, Baumz, 2: 430, 1772.

S. salicifolia lanceolata T. & G. Fl. N. A. I: 415. 1840.

A shrub up to 6° high, the twigs yellowish-brown, puberulent when young. Leaves petioled, narrowly oblanceolate to oblong, puberulent on the veins beneath, sharply and mostly finely serrate, acute at each end, 1'-2½' long, 5"-8" wide; inflorescence narrowly paniculate, densely puberulent or tomentulose; petals white, suborbicular about 1" long; follicles glabrous.

In wet soil, Ontario to New York, North Carolina, Saskatchewan, Indiana and Missouri, June-Aug.

Spiraea tomentòsa L. Hardhack. Steeple-bush.

Spiraea tomentosa L. Sp. Pl. 489. 1753.

Erect, shrubby, usually simple, the stems floccose-pubescent. Leaves short-petioled, ovate or oval, 1'-2' long, 6"-12" wide, unequally serrate, obtuse or acutish at the apex, narrowed or rounded at the base, glabrous and dark-green above, woolly-pubescent with whitish hairs beneath; stipules deciduous or none; flowers pink or purple, rarely white, about 2" broad, in dense terminal panicles; follicles pubescent.

In swamps and low ground, Nova Scotia to Manitoba, south to Georgia and Kansas. Silver-leaf or -weed, White cap. Meadow-sweet. Poor man's-soap. Spice-hardhack. Rosy-bush. July-Sept.



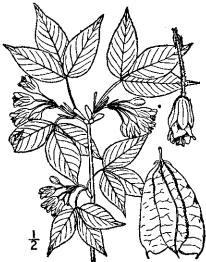
Stanleya pinnàta (Pursh) Britton. Stanleya.

Cleome pinnata Pursh, Fl. Am. Sept. 739. 1814. Stanleya pinnatifida Nutt. Gen. 2: 71. 1818. Stanleya pinnata Britton, Trans. N. Y. Acad. Sci. 8: 62. 1888.

Stems stout, 2°-5° tall, sometimes decumbent. Lower leaves pinnatifid or pinnately divided, or entire, 5'-8' long, 1'-3' wide, long-petioled; upper leaves similar, or less divided, or narrowly oblong or lanceolate, entire, short-petioled and narrowed at the base; flowers numerous, showy; petals 8"-12" long; filaments filiform, exserted; siliques 2'-3' long, about 1" thick, 2-3 times as long as their stipes, spreading, downwardly curved, somewhat constricted between the seeds when dry.

In dry soil, South Dakota and Nebraska to California, New Mexico and Arizona. Plant with the aspect of a Cleome. May-July.





Staphylea trifòlia L.

American Bladdernut.

Staphylea trifolia L. Sp. Pl. 270. 1753.

A branching shrub, 6°-15° high, or in the south sometimes a tree up to 30° high with a trunk 6' in diameter, with smooth striped bark. Young leaves and petioles pubescent; mature foliage glabrate; stipules linear, 4"-6" long, caducous; leaflets ovate or oval, $1\frac{1}{2}$ long, acuminate at the apex, obtuse or somewhat cuneate at the base, finely and sharply serrate, the lateral ones sessile or nearly so, the terminal one stalked; stipels subulate; flowers campanulate, racemed, about 4" long; pedicels bracted at the base, slightly longer than the flowers; capsule about 2' long, I' wide, much inflated, the 3 (rarely 4) carpels separate at the summit and dehiscent along the inner side.

In moist woods and thickets, Quebec and Ontario to Minnesota, South Carolina, Missouri and Kansas. April-

Stellaria longipes Goldie

Long-stalked Stitchwort.

Stellaria longipes Goldie, Edinb. Phil. Journ. 6:

327. 1822.

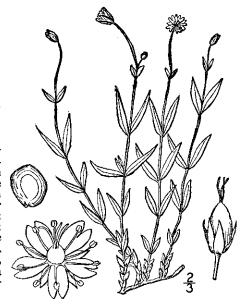
A. longipes Coville, Contr. Nat. Herb. 4: 70. 1893.

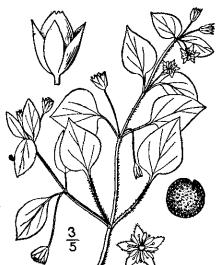
Stellaria Edwardsii R. Br. in Parry's Voy. App. cclxxi. 1824.

A. longipes Edwardsii Britton, Mem. Torr Club 5: 150. 1894.

Erect or ascending, tufted, simple or rarely sparingly branched, 3'-12' high, glabrous, shining, glaucous or pubescent. Leaves lanceolate or linear-lanceolate, 5"-18" long, 1"-3" wide at the base, rigid, ascending or erect; flowers few, 3"-5" broad, terminal, on long slender that the second of t erect pedicels; bracts scarious, lanceolate; sepals ovate or lanceolate, acute or acutish; petals 2-cleft, exceeding the calyx; capsule ovoid, longer than the sepals; seeds smooth.

In moist places, Labrador and Nova Scotia to Quebec, west to Alaska and Minnesota, south in the Rocky Mountains to Colorado, and to Cali-





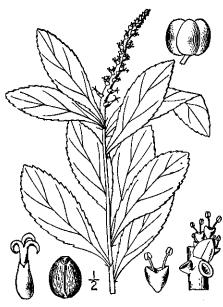
Stellaria media (L.) Vill. Common

Chickweed. Satin-flower. Tongue-grass.

Alsine media L. Sp. Pl. 272. 1753. Stellaria media Vill. Hist. Pl. Dauph. 3: 615. 1789.

Annual, weak, tufted, much branched, decumbent or ascending, 4'-r6' long, glabrous except a line of hairs along the stem and branches, the pubescent sepals and the sometimes ciliate petioles. Leaves ovate or oval, 2"-1½ long, acute or rarely obtuse, the lower petioled and often cordate, the upper sessile; flowers 2"-4" broad, in terminal leafy cymes or also solitary in the axils; pedicels slender; sepals oblong, mostly acute, longer than the 2-parted petals; stamens 2-10; capsule ovoid, longer than the calyx; seeds rough, sometimes crested.

In waste places, meadows and woods, nearly throughout North America. Naturalized from Europe, though possibly native northward. Native also of Asia and now almost universally distributed as a weed. White bird's-eye. Chicken- or winter-weed.



Stillingia sylvática L. Queen's Delight. Oueen-root.

Stillingia sylvatica L. Mant. 1: 126. 1767.

A bright green slightly fleshy perennial herb. Stem rather stout, erect or assurgent, usually branched from the base, 1°-3½° tall. Leaves obovate, oblong or elliptic, 5"-4' long, obtuse, or subacute, serrate with appressed teeth, often narrowed at the 2-glandular base, sessile; flowers in terminal spikes, lemon-colored, subtended by small bracts furnished with saucer-shaped glands; calyx cup-shaped; petals and glandular disk none; capsule depressed, 5"-7" in diameter, 3-lobed; seeds ovoid, 3" long, light gray, minutely pitted and papillose, the base flattened.

In dry soil, Virginia to Florida, Kansas and Texas. Called also Silver-leaf; the root, known as Queen's-root, an alterative. Yaw-root. Nettle-potatoe. March-

Stillingia salicifòlia (Torr.) Small, with relatively narrower and serrulate leaves, ranges from Kansas

Stylophorum diphýllum (Michx.) Nutt. Yellow or Celandine Poppy.

Chelidonium diphyllum Michx, Fl. Bor, Am. 1: 309. 1803. Stylophorium diphyllum Nutt. Gen, 2: 7. 1818. Meconopsis diphylla DC. Syst. Veg. 2: 88. 1821.

Glaucous, especially the lower surfaces of the leaves, sparingly pubescent, 12'-18' high. Leaves basal and cauline, 4'-10' long, slender-petioled, 1-2-pinnatifid, the divisions obovate, obtuse, lobed or irregularly crenate, those of the stem 2-4, the upper opposite; flowers 2-4, terminal, about 1' broad, deep yellow; sepals hirsute, caducous; petals obovate, rounded; capsule 1' long, ovoid, acute at each end, tipped with the persistent style.

In low woods, western Pennsylvania and Ohio to Tennessee, west to Wisconsin and Missouri. March-May.



Styrax americàna Lam. Smooth Storax.

Styrax americana Lam. Encycl. 1: 82. 1783.

A shrub 4°-10° high, the foliage glabrous or very nearly so throughout. Leaves green on both sides, oblong, oval or obovate, acute or obtuse at the apex, narrowed at the base, entire, or toothed, 1'-3' long, ½'-1½' wide; petioles 2"-4" long, often scurfy when young; flowers few in the mostly short racemes or sometimes solitary, 4"-7" long, about the length of their pedicels; calyx and pedicels glandular-dotted; petals oblong-lanceolate, acute, puberulent on the outer surface or glabrous, valvate or but slightly overlapping in the bud; fruit subglobose, puberulent, about 3" in diameter.

In moist thickets and along streams, Virginia to Florida, Illinois, Missouri, Arkansas and Louisiana. Spring-orange, March-April.



Symplocos tinctòria (L.) L'Her. Sweet-leaf. Horse-sugar.

Hopea tinctoria L. Mant. 105. 1767.

S. tinctoria L'Her. Trans. Linn. Soc. 1: 176. 1791.

A shrub or small tree, sometimes attaining a height of 35° and a trunk diameter of 9'. Leaves rather coriaceous, oblong or slightly obovate, acute or acuminate at both ends, crenate-serrate with low teeth or repand, short-petioled, puberulent or pubescent on both sides when young, glabrous or nearly so above and dark green when old, pale and persistently pubescent beneath, 3'-6' long, 1'-3' wide, deciduous at the northern range of the species, persistent at the south, turning yellowish-green in drying; flowers bright yellow, fragrant, 4"-6" broad, in sessile scaly-bracted clusters, appearing at the north before the leaves; corolla almost polypetalous, its segments oblong, obtuse, each bearing a cluster of stamens; drupe dry, nut-like, oblong, 3'-6" long, pubescent, crowned with the small calyx lobes.

Woods and thickets, Delaware to Florida, Arkansas and Louisiana. Wood soft, weak, pale red or white; weight per cubic foot 33 lbs. Yellow wood. Florida laurel. Dye-leaves. March-April.





Syringa vulgàris L. Lilac.

Syringa vulgaris L. Sp. Pl. 9. 1753.

A glabrous shrub, 10°-25° high with terete branches. Leaves ovate, entire, deciduous, green on both sides, acuminate at the apex, truncate or subcordate at the base, 2'-5' long, 1'-3' wide; petioles ½'-1' long; flowers lilac or white, very numerous, 5"-7" long, 4"-5" broad, in large terminal thyrses; calyx about 1" long; corollatube about 1" in diameter; ultimate pedicels short; capsule 8"-12" long, 2" thick.

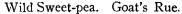
Escaped from gardens to roadsides, Maine and New Hampshire to eastern New York and Pennsylvania. Native of eastern Europe. Pipe-tree. Pipe-privets. Blue-pipe. Blue-ash. Roman-willow. Flowers fragrant. April-May.

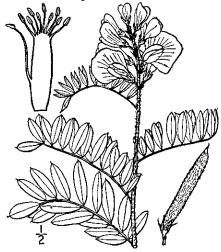
Tephrosia virginiana (L.) Pers. Cat-gut. Wild Sweet-pea. Goat's Rue.

Cracca virginiana L. Sp. Pl. 752. 1753. Galega virginiana L. Sp. Pl. Ed. 2, 1062. 1763. Tephrosia virginiana Pers. Syn. 2: 329. 1807.

Erect or ascending, more or less villous or silkypubescent with whitish hairs, 1°-2° high. Roots long, fibrous, tough; leaves short-petioled; leaflets 7-25, oblong, linear-oblong or the terminal one oblanceolate, narrowed or cuneate at the base, rounded, mucronate acutish or emarginate at the apex, 9"-12" long, 2"-4" wide; flowers yellowishpurple, 6"-9" long, crowded in a terminal often compound nearly sessile raceme; pedicels 2"-4" long; pod linear, densely pubescent, 1'-2' long.

In dry sandy soil, Maine to Minnesota, Arkansas, Florida, Louisiana and northern Mexico; western races more copiously pubescent than eastern, have been regarded as specifically distinct as Cracca holosericea (Nutt.) Britten & Baker. Turkey-, rabbit- or hoary pea. Devil's shoestrings. June-July.







Thalictrum dasycarpum Fisch. & Lall. Purplish or Tall Meadow-Rue.

Thalictrum dasycarpum Fisch. & Lall. Ind. Sem. Hort. Petrop. 8: 72. 1842.

Stout, erect, purplish, 4°-7° high, leafy, branching above, pubescent or glabrous; leaves 3-4-ternate, those of the stem sessile or shortpetioled; leaflets oblong or obovate, dark green above, commonly somewhat pubescent, but neither waxy nor glandular beneath, and with a main apical pointed lobes; panicle compound, leafy, 1° long or more; flowers dioecious or perhaps sometimes polygamous; filaments narrow, slightly widened above; anthers linear or linear-oblong, cuspidate; achenes ovoid. glabrous or pubescent, short-stipitate, with 6-8 longitudinal wings.

In copses and woodlands, New Jersey to North Dakota, Saskatchewan, Nebraska and Arizona. Illustrated in our first edition as T. purpurascens L. June-Aug.

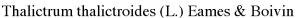


Thalictrum diòicum L. Early Meadow-Rue.

Thalictrum dioicum L. Sp. Pl. 545. 1753.

Glabrous, erect, 1°-2° high, slender, leafy. Roots not yellow; leaves 3-4-ternate; leaflets thin, pale beneath, orbicular or broader, often cordate and the terminal one somewhat cuneate, 5-9-lobed; flowers dioecious, greenish, drooping or spreading; panicle elongated, of numerous lateral corymbs or umbels; filaments longer than the sepals; anthers linear, blunt, longer than the filaments: stigma elongated; achenes ovoid, sessile or minutely stipitate, strongly ribbed, much longer than the style.

In woods, Maine to Alabama, Saskatchewan and Missouri. Ascends to 4500 ft. in North Carolina. Poor-man's rhubarb. Shining grass. Quicksilverweed. Feathered columbine. April-May. Recorded from Labrador.



Rue-Anemone.

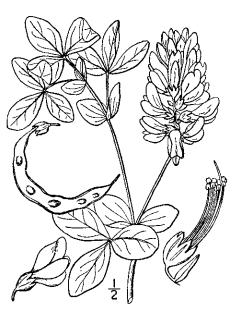


Anemone thalictroides L. Sp. Pl. 542. 1753. Thalictrum anemonoides Michx, Fl. Bor, Am. 1: 322. 1803.
Syndesmon thalictroides Hoffing. Flora 15: Part 2, Intell. Bl. 4, 34. 1832.

Anemonella thalictroides Spach, Hist. Veg. 7: 240. 1839.

Low, glabrous, 4'-9' high, the flowering stem arising in early spring from the cluster of tuberous roots, the ternately-compound basal leaves appearing later and resembling those of Thalictrum. Leaves of the involucre similar, sessile, the leaflets long-petioled; sepals 5-10, white or pinkish, longer than the stamens; flower 1'-1' broad; flowers perfect, umbellate immediately above the involucre; achenes sessile, pointed, 4"-6" long.

In woods, New Hampshire and Massachusetts to Florida, Ontario, Minnesota and Kansas. Leaflets are occasionally borne on the stem below those of the involucre. March-June. Windflower. May-flower.



Thermopsis rhombifòlia (Nutt.) Richards. Prairie Thermopsis or False Lupine.

Cytisus rhombifolius Nutt. Fraser's Cat. 1813.

Thermia rhombifolia Nutt. Gen. 1: 282. 1818.

Thermopsis rhombifolia Richards, Frank. Journ. App. 13. 1823.

Erect, 8'-20' high, branched, appressed silkypubescent. Leaves petioled; leaflets oval or obovate or rhombic-elliptic; obtuse, entire, 2'-12' long, 3"-6" wide, sessile; stipules broad; racemes terminal or lateral, rather dense, few-flowered, 2'-5' long; pedicels 2"-4" long, bracted; flowers yellow, about 10" long; pod linear, generally strongly recurved-spreading, several-seeded, stalked in the calyx, 3'-4' long.

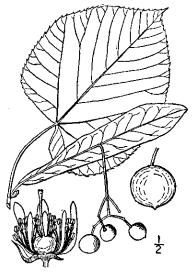
In sandy soil, on plains and hills, North Dakota to Nebraska. Kansas, Saskatchewan, Montana and Colorado. Yellow or bush-pea. June-July.



Thlaspi arvénse L. Field Pennycress. Frenchweed.

Thalspi arvense L. Sp. Pl. 646. 1753. Annual, erect, glabrous, 6'-18' high, sim-Annual, erect, glabrous, 6'-18' high, simple or branching above. Basal leaves petioled, oblanceolate, early deciduous; stem-leaves oblong or lanceolate, sparingly dentate, the upper clasping the stem by an auricled base, the lower merely sessile; flowers white, about 1" long, ½" broad; pedicels spreading or curved upward, slender, 5"-9" long in fruit; pods nearly orbicular when ripe, 4"-6" broad, very flat, broadly winged all around, notched at the apex in long racemes; style minute, or at the apex, in long racemes; style minute, or none; seeds rugose, about 6 in each cell.

In waste places and on hallast, Quebec to New York, Manitoba and Kansas. Naturalized from Europe. Native also of Asia. June-Aug. Bastard cress. Dish-mustard. Treacle-wort.



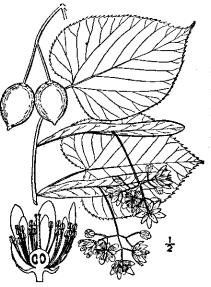
Tilia americana var. heterophylla (Vent.) Loud.

White Bass-wood. Bee-tree. Linden.

T. heterophylla Vent. Mem. Acad. Paris 4: 16. pl. 5. 1802.

A forest tree, 45° - 70° high, with a trunk $1\frac{1}{2}^{\circ}$ - $3\frac{1}{2}^{\circ}$ in diameter. Leaves larger than in either of the preceding species (often 6'-8' long), inequilateral, cordate or truncate, glabrous and dark green above, white beneath with a fine downy pubescence, acute or acuminate; floral bracts 3'-5' long, narrowed at the base; flowers slightly larger and often fewer than those of *T. americana*; fruit globose, about 5" in diameter.

In woods, New York and Pennsylvania, south along the Alleghanies and Blue Ridge to Florida and Alabama, west to central Illinois, Kentucky and Tennessee. White linn. Teil- or tile-tree. Cottonwood. Silver-leaf poplar. Wahoo. Wood weak, light brown; weight per cubic foot 26 lbs.



Tilia americàna L. Bass-wood. American Linden. White-wood.

Tilia emericana L. Sp. Pl. 514. 1753. T. glabra Vent. Mem. Acad. Paris 4: 9. pl. 2. 1802. Tilia canadensis Michx. Fl. Bor. Am. 2: 306. 1803.

A large forest tree, 60°-125° high, with spreading branches; trunk 2°-5° in diameter. Leaves obliquely ovate, cordate or sometimes truncate at the base, 2′-5′ wide, coriaceous, glabrous on both the base, 2'-5' wide, coriaceous, glabrous on both sides, or with some pubescence on the veins of the lower surface, sharply serrate with glandular teeth, abruptly acuminate or acute; petioles I'-2' long; floral bract 2'-4' long, often narrowed at the base, strongly veined; cymes drooping, 6-20-flowered; flowers 5"-7" broad, fragrant; petals yellowish-white, crenate, slightly longer than the pubescent sepals; scales similar to the petals, but smaller; fruit globose-ovoid, 4"-5" in diameter.

In rich woods and along river-bottoms, New Brunswick to Georgia, especially along the mountains, west to Manitoba, Nebraska and Texas. Wood soft, weak, light brown or reddish; weight per cubic foot 28 lbs. Used for cabinet work and for paper pulp. Bast-, lin., lime-, bee-, black-lime- or monkey-nut-tree. White-lind. Southern linn. Yellow bass-wood. Wickup. Daddynuts. Spoon-wood. Whistle-wood. May-June.

Toxicodendron Vérnix (L.) Kuntze. Poison or Swamp Sumac. Poison

Rhus Vernix L. Sp. Pl. 265. 1753.

Toxicodendron pinnatum Mill, Gard, Dict. Ed. 8, no. 4. 1768.

Rhus venenata DC. Prodr. 2: 68. 1825.

Toxicodendron Vernix Kuntze, Rev. Gen. Pl.

A shrub or small tree, with maximum height of 25° and trunk diameter of 6'. Leaves petioled, pinnate, 6'-15' long, glabrous or somewhat puberulent; leaflets 7-13, thin, obovate, oval, or the lowest ovate, 2'-4' long, I'-12' wide, green both sides, entire, short-acuminate at the apex, narrowed or rounded at the base, short-stalked; rachis terete; flowers green, about I" broad, in loose axillary panicles 3'-8' long; drupe globose-oblong, 2" in diameter, gray, gla-

In swamps, Maine to Vermont, southern Ontario, Florida, Minnesota, Missouri and Louisiana. Very poisonous. Wood soft, yellowish brown; weight per cubic foot 27 lbs. June. Poison ash or tree. Swamp or poison dogwood. Poison-wood.



Tragia nepetaefòlia Cav. Catnep Tragia.

T. nepetaefolia Cav. Icones 6: 37. pl. 557, f. 1. 1801. Tragia urticaefolia Michx. Fl. Bor. Am. 2: 176.

Perennial, hispid with stinging hairs. Stem slender, erect or reclining, 6'-15' long; leaves triangular-ovate or lanceolate, 5''-2' long, dentate-serrate, cordate, short-petioled, the lower sometimes orbicular; racemes 5"-1½' long, many-flowered; staminate flowers mostly with a 3-lobed calyx and 3 stamens; pistillate flowers with a 5-lobed calyx; capsule much depressed, 3" in diameter, hirsute; seeds globose, chestnut brown, smooth, 2" in diameter.

In sandy soil, Georgia and Florida to Missouri, Kansas, Mexico and New Mexico. Recorded from Virginia. May-Oct.

Toxicodendron radicans (L.) Kuntze. Poison, Climbing or Three-leaved Ivv. Poison Oak. Climath.

Toxicodendron pubescens P. Mill. Poison Oak.

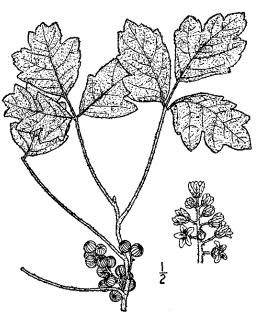
Rhus Toxicodendron L. Sp. Pl. 266. 1753. T. pubescens Mill. Gard. Dict. Ed. 8, no. 2.

R. Toxicodendron quercifolium Michx. Fl. Bor, Am. 1: 183, 1803.
R. quercifolia Steud. Nomencl. 689. As syno-

nym. 1821. A low branching shrub, 3° high or less, spreading by underground branches, the

young shoots densely pubescent. Leaves long-petioled, 3-foliolate; leaflets ovate to obovate in outline, firm in texture, dark green and sparingly pubescent above, paler green and densely velvety-pubescent beneath, 4' long or less, irregularly lobed, toothed or sinuate-margined; panicles 1'-3' long; petals oblong, obtuse, veined; fruit pubescent when young, smooth or sometimes papillose when mature, depressed-globose, 3"-4½" in diameter.

Dry woodlands, southern New Jersey and Delaware to Georgia, Alabama and Texas. April-May.





Rhus radicans L. Sp. Pl. 266. 1753. Rhus Toxicodendron of American authors, in part, not L. Toxicodendron vulgare Mill. Gard. Dict. Ed. 8, no. 1. 1768.

Rhus microcarpa Steud. Nomencl. 689. 1821. T. radicans Kuntze, Rev. Gen. 153. 1891.

A woody vine, climbing by numerous aerial rootlets, or erect and bushy, the stem sometimes 3'-4' in diameter. Leaves petioled, 3-foliolate, glabrate or somewhat pubescent, especially beneath; leaflets ovate or rhombic, 1'-4' long, entire or sparingly dentate or sinuate, acute or short-acuminate at the apex, the lateral sessile or short-stalked, inequilateral, the terminal one stalked, rounded or narrowed at the base; flowers green, 1½" broad, in loose axillary panicles, 1'-3' long; fruit similar to that of the preceding, 1½"-2½" in diameter, glabrous, or sparingly pubescent.

Thickets and along fences, etc., often ascending high trees, Nova Scotia to British Columbia, Florida, Arkansas, Texas and Mexico. Bermuda; Bahamas. Very poisonous. Consists of many races, differing in habit, shape of leaflets and pubescence. Trailing or climbing sumac. Mercury. Black mercury-vine. Markry. Mark-weed. Picry. May-June.

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Trautvetteria carolinénsis (Walt.) Vail. False Bugbane.

Hydrastis carolinensis Walt, Fl. Car. 156. 1788.

Cimicifuga palmata Michx. Fl. Bor. Am. 1: 316. 1803.

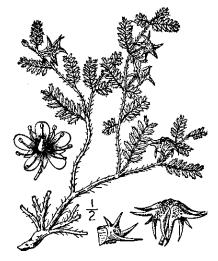
Trautvetteria palmata F. & M. Ind. Scm. Petr. 1: 22. 1834.

Trautvetteria carolinensis Vail, Mem. Torr. Club 2: 42. 1890.

T. applanata Greene, Leaflets 2: 191. 1912.

Stout, 2°-3° high, branching, nearly glabrous, except the lower surfaces of the leaves. Basal leaves long-petioled, 6'-8' broad, 4'-5' long, deeply 5-11-lobed, the lobes acute and sharply dentate; panicle ample, the flowers 3"-6" broad, borne in cymose clusters at the ends of its branches; filaments slender, slightly widened; anthers oblong.

Southwestern Pennsylvania to the mountains of Virginia and Kentucky, south to Florida, west to Indiana and Missouri. Ascends to 6000 ft. in North Carolina. June-July.



Tribulus terréstris L. Ground Burnut. Land Caltrop.

Tribulus terrestris L. Sp. Pl. 387. 1753.

Annual, pubescent, branched from the base, the stem prostrate or ascending, sometimes 1° long or more. Leaves petioled; stipules small; leaflets 4-8 pairs, oblong, inequilateral, opposite, short-stalked, acutish or obtuse, 3"-8" long; flowers solitary, about 6" broad; peduncles shorter than the leaves; petals oblong, about as long as the sepals; segments of the fruit usually with 2 long spines, 2 shorter ones, and a row of very short ones forming a crest on the back, also commonly with some bristle-like hairs.

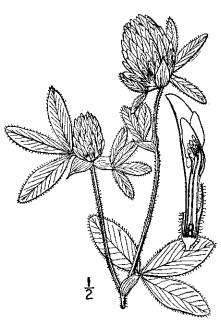
In ballast and waste places about the eastern seaports, and from Illinois to Nebraska, Arkansas, Arizona and Mexico. Adventive from Europe. June-Sept.

Trifolium praténse L. Red, Purple or Meadow Clover.

Trifolium pratense L. Sp. Pl. 768. 1753.

Perennial, more or less pubescent, branching, decumbent or erect, 6'-2° high. Leaves long-petioled; stipules ovate, strongly veined, subulate-tipped, 6''-10'' long; leaflets short-stalked, all from the same point, oval, oblong, or obovate, narrowed at base, hardly cuneate, obtuse and sometimes emarginate at the apex, often dark-spotted near the middle, finely denticulate, ½'-2' long; heads globose or somewhat ovoid, sessile (rarely peduncled), about 1' long; flowers red (rarely white), sessile, about 6'' long, remaining erect in fruit; calyx hairy, its subulate teeth shorter than the corolla.

In fields and meadows, common throughout our area and in the southern States. Bermuda. Naturalized from Europe and widely cultivated for fodder. Native also of northern Asia. Leaflets commonly 3, sometimes 4-11. Marl- or cow-grass. Broad-leaved clover. Sugar-plums. Honeysuckle-clover, knap, suckles. April-Nov.

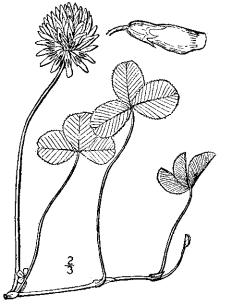


Trifolium rèpens L. White, Dutch or Honeysuckle Clover. White Trefoil.

Trifolium repens L. Sp. Pl. 767. 1753.

Perennial, glabrous, or with a few scattered hairs, branching at the base, the branches creeping, often rooting at the nodes, 4'-12' long. Leaves long-petioled; stipules ovate-lanceolate membranous, acute, 2"-5" long; leaflets all from the same point, short-stalked, obovate, emarginate or obcordate, broadly cuneate at the base, denticulate, 4"-9" long; heads globose, long-peduncled; flowers white, 3"-5" long; pedicels 1"-2" long, finally reflexed; corolla 2-3-times as long as the calyx; calyx-teeth acuminate, somewhat shorter than the tube; pod about 4-seeded.

In fields, waste ground and open places, very common throughout our area and in the southern States. Also in the Northwest. Naturalized from Europe, or perhaps native in the extreme north. Naturalized in the mountains of Jamaica and in Bermuda. Native also of Siberia. Widely distributed in all temperate regions. Leaflets sometimes 4-9. Heads occasionally proliferous. Flowers sometimes pinkish. English names, sheep's gowan, honeystalks, lambsucklings, and sometimes shamrock. May-Dec.



Trollius láxus Salisb. American Globeflower. Fig. 1856.

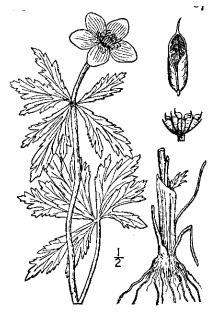
Trollius americanus Muhl. Trans. Amer. Phil. Soc. 3: 172, name only. 1791.

Trollius laxus Salisb. Trans. Linn. Soc. 8: 303. 1803.

Stems slender, weak, ascending, 1°-2° long. Leaves all but the upper petioled (the lower petioles sometimes a foot long), palmately 5-7-parted, 2'-4' wide, the segments obovate, cuneate, lobed, cleft or toothed; flowers generally solitary, 1½' broad; sepals 5-7, ovate or obovate, obtuse, yellowish-green, spreading; petals 15-25, minute, much shorter than the numerous stamens; filaments filiform; anthers linear, 1" long; head of fruit nearly an inch broad, the follicles 4" long, each tipped with a straight subulate beak of one-fourth its length.

In swamps, New Hampshire (?), Connecticut to Delaware, west to Michigan. May-July.

T. albiflòrus (A. Gray) Rydb., of the Rocky Mountain region, differs in having white sepals.





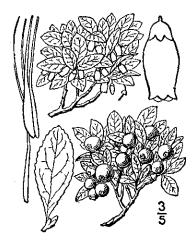
Vaccinium arboreum Marsh. Farkleberry. Tree-Huckleberry.

Vaccinium arboreum Marsh, Arb. Amer. 157. 1785. Batodendron arboreum Nutt. loc. cit. 1843.

A divergently branched shrub or small tree, reaching a maximum height of about 30°, and trunk diameter of 9′, the twigs glabrous or slightly pubescent. Leaves obovate or oval, obtuse or acute and mucronulate at the apex, narrowed at the base, short-petioled, shining and bright green above, duller, and sometimes sparingly pubescent beneath, entire or glandular-denticulate, coriaceous, 1′-2′ long, ½′-1′ wide; flowers pendulous, slender-pedicelled; corolla white, campanulate, 5-lobed; bracts persistent; berry about 3″ in diameter, inedible.

In dry sandy soil, North Carolina to Kentucky, Indiana, Illinois, Missouri, Oklahoma, Florida and Texas. Wood hard, reddish brown, weight per cubic foot 47 lbs. Gooseberry. Sparkleberry. May-June.

Batodendron andrachnefórme Small, of Missouri, differs by its shorter-pedicelled smaller flowers, the corolla globular-campanulate.



Vaccinium caespitòsum Michx. Dwarf Bilberry.

Vaccinium caespitosum Michx. Fl. Bor. Am. 1: 234. 1803.

A shrub, 3'-12' high, much branched, nearly glabrous throughout, the twigs not angled. Leaves obovate or oblong-cuneate, obtuse or acute, 6"-12" long, green and shining both sides, nearly sessile, serrulate with close bluntish teeth; flowers mostly solitary in the axils and longer than their drooping pedicels; calyx slightly 5-toothed (rarely 4-toothed); corolla obovoid or obovoid-oblong, pink or white, 5-toothed or rarely 4-toothed; stamens 10, rarely 8; berry blue with a bloom, sweet, about 3" in diameter.

Rocky and gravelly soil, Labrador to Alaska, Maine, Vermont, northern New York, Wisconsin and south in the Rocky Mountains to Colorado, ascending to the highest mountain summits in New York and New England. June-July. Fruit ripe Aug.



Vaccinium corymbòsum L. Highbush or Tall Blueberry.

Vaccinium corymbosum L. Sp. Pl. 350. 1753. V. amoenum Ait. Hort. Kew. 2: 12. 1789.

A shrub, 6°-15° high, the twigs terete, minutely warty, greenish-brown, puberulent, or glabrous. Leaves oval or oblong, mostly acute at each end, entire or serrulate, sometimes ciliate, green and glabrous above, paler and often pubescent at least on the veins beneath, short-petioled, 1'-3' long, ½'-1½' wide; flowers in short racemes, appearing with the leaves, equalling or longer than their pedicels; bracts oblong or oval, deciduous; calyx 5-lobed; corolla cylindric, or slightly constricted at the throat, white or faintly pink, 3"-6" long, 1½"-3" thick, 5-toothed (rarely 5-lobed); stamens 10; berry blue with a bloom, 3"-4" in diameter, pleasantly acid.

In swamps, thickets and woods, Maine to Virginia, Quebec, Minnesota and Louisiana, appar-

ently erroneously recorded from farther north. May-June. Fruit ripe July-Aug. Great whortleberry. Seedy dewberry Swamp-blueberry. The late market blueberry.

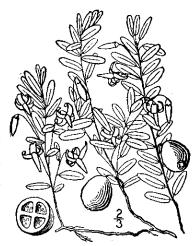
Vaccinium macrocarpon Ait.

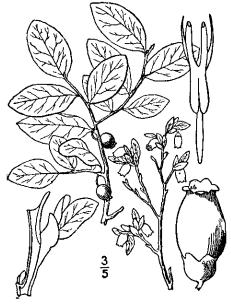
Large or American Cranberry.

Vaccinium macrocarpon Ait. Hort. Kew. 2: 13. pl. 7. 1789. O. palustris macrocarpus Pers. Syn. 1: 419. 1805. Oxycoccus macrocarpus Pursh, Fl. Am. Sept. 263. 1814.

Similar to the preceding species, but stouter and larger, the branches often 8' long. Leaves oval, oblong, or sometimes slightly obovate, obtuse at both ends, entire, 3"-9" long, 1"-4" wide, white or pale beneath, the margins slightly revolute; flowers several in mostly lateral somewhat racemose clusters, nodding on erect pedicels, 2-bracteolate above the middle; corolla light pink, 4"-5" broad, divided very nearly to the base; filaments puberulent, about one-third the length of the anthers; berry oblong or nearly globose, 4"-9" long.

In bogs, Newfoundland to western Ontario, Virginia. West Virginia, Michigan and Arkansas. Bear-berry. Marsh-cranberry. June-Aug. Fruit ripe Sept.-Oct.





Vaccinium ovalifòlium I. E. Smith. Tall or Oval-leaved Bilberry.

Vaccinium ovalifolium I. E. Smith in Rees' Cyclop. 36: No. 2. 1817.

A straggling branched shrub, 3°-12° high, the branches slender; twigs glabrous, jointed, sharply angled. Leaves oval, or elliptic, short-petioled, glabrous on both sides, green above, pale and glaucous beneath, rounded at both ends, or somewhat narrowed at the base, thin, sometimes mucronulate, entire or very nearly so, I'-2' long; flowers commonly solitary in the axils, on rather short recurved pedicels; calyx-limb slightly toothed; corolla ovoid; stamens 10; berry blue with a bloom, 4"-5" in diameter.
Woods, Quebec to Michigan, Oregon and Alaska.

Also in Japan. June-July. Fruit ripe July-Aug. Vaccinium nubigenum Fernald, of mountain rocks

in Quebec, has smaller serrulate elliptic leaves acute at both ends, the corolla urceolate, pink.

Vaccinium oxycoccos L.

Small or European Cranberry.

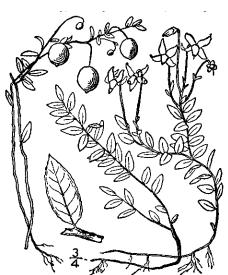
Vaccinium Oxycoccos L. Sp. Pl. 351. 1753. V. Oxycoccus intermedium A. Gray. Syn. Fl. ed 2, 21: 396. 1886.

Oxycoccus palustris Pers, Syn. 1: 419. 1805. O. Oxycoccus MacM. Bull. Torr. Club 19: 15. 1892.

Stems very slender, creeping, rooting at the nodes, 6'-18' long. Branches ascending or erect, 1'-6' high; leaves thick, evergreen, ovate, entire, acutish at the apex, rounded or cordate at the base, dark green above, white beneath, 2"-8" long, 1"-32" wide, the margins more or less revolute; flowers 1-6, mostly umbellate, rarely racemose, from terminal scaly buds, nodding, on erect filiform pedicels, 2-bracteolate at or below the middle; corolla pink, about 4" broad, divided nearly to the base; filaments puberulent, about half the length of the anthers; berry globose, 3"-5" in diameter, often spotted when young.

In cold bogs, Newfoundland to Alaska, New Jersey, North Carolina, Michigan and British Columbia.
Also in Europe and Asia. May-July. Fruit ripe
Aug.-Sept. Bog- or marsh-wort. Moss-, bog-, fenor moor-berry. Marsh-berry. Crone, cran-, cram- or crane-berry. Crow or craw-berry. Moss-

millions [melons]. Sow- or sour-berry. Swamp red-berry.

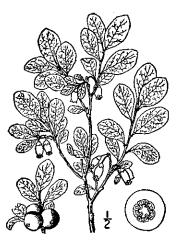


Vaccinium uliginòsum L. Great or Bog Bilberry. Bog Whortleberry. Bleaberry.

Vaccinium uliginosum L. Sp. Pl. 350. 1753.

A stiff much-branched shrub, 6'-24' high. Leaves thick when mature, glabrous or nearly so on both sides, dull, pale or glaucous beneath, obovate, oblong, or oval, obtuse, or retuse, narrowed at the base, entire, nearly sessile, finely reticulate-veined, 5"-12" long; flowers 2-4 together, or sometimes solitary near the ends of the branches, mostly shorter than the drooping pedicels; calyx 4-lobed (sometimes 5-lobed); corolla pink, ovoid or urn-shaped, 4-5toothed; stamens 8-10; berry blue to black, with a bloom, about 3" in diameter, sweet.

Summits of the mountains of New England and the Adirondacks, mainly above timber-line; Newfoundland and Labrador to Quebec, Maine, and shores of Lake Superior, to Alaska. Also in northern Europe and Asia. Bog-blueberry, June-July. Fruit ripe July-Aug.



Vaccinium vitis-idaea L.

Mountain Cranberry. Wind- or Cowberry.

Vaccinium Vitis-Idaea I., Sp. Pl. 351. 1753. Vitis-Idaea Vitis-Idaea Britton, Bull. N. Y. Bot. Gard. 3:

Vaccinum Vitis-Idaea minus Lodd. Bot. Cab. pl. 1023.

1825.

Branches erect, terete, 3'-8' high, puberulent or glabrous. Leaves thick, persistent, crowded, green and somewhat shining above, paler and black-dotted beneath, quite glabrous, or minutely ciliate toward the base, obovate or oval, short-petioled, entire or sparingly serrulate, 3"-8" long, the margins revolute; flowers longer than their pedicels; bracts

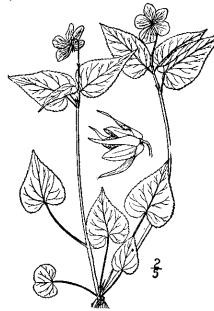
reddish, short-oblong, tardily deciduous; bractlets 2; berries dark red, acid, 4"-5" in diameter.

In rocky places, Essex Co., Mass., coast of Maine, higher mountains of New England to Labrador and arctic America, west to Lake Superior, British Columbia and Alaska. Ascends to 5300 ft. in the Adirondacks. Also in northern Europe and Asia. Fruit used as a sub-

stitute for cranberries. June-July. Flowering box.

Ling- or wine-berry. Red whortleberry or bilberry. Rock-cranberry. Cluster-berries. Fruit ripe Aug.-Sept.



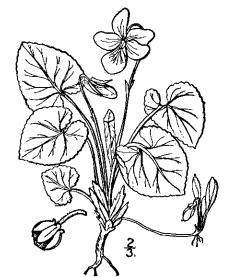


Viola canadénsis L. Canada Violet.

Viola canadensis L. Sp. Pl. 936. 1753.

Usually 8'-16' high, glabrous or but sparsely and minutely pubescent; leaves broadly ovate, cordate, acuminate or acute, serrate; stipules sharply lanceolate; flowers single from the axils of cauline leaves, often appearing throughout the season; sepals subulate, spreading; inner surface of petals white above, bright yellow at the base, the outside more or less tinged with violet, the three lower striped with fine dark lines, the lateral pair bearded; capsules ovoid to subglobose, 3"-5" long, often downy or puberulent; seeds brown, I" long.

In mountain forests or wooded uplands, New Brunswick to Saskatchewan, south to South Carolina, Alabama, Nebraska, and in the Rocky Mountains to Arizona and New Mexico. Ascends to 4000 ft. in Virginia. American sweet violet. Hens. Juneflower. May-July.



Viola odoràta L. English, March, or Sweet Violet.

Viola odorata L. Sp. Pl. 934. 1753.

Producing above ground leafy stolons rooting freely at the nodes and bearing numerous cleistogamous flowers in summer; petioles 2'-5' long; blades broadly ovate or orbicular, rounded or obtuse at the apex, cordate, crenate 1'-2' wide, finely pubescent; flowers on scapes as long as the leaves or shorter; very fragrant, violet or white, lateral petals usually bearded; style hook-shaped; sepals oblong, mostly obtuse; cleistogamous flowers on slender recurving peduncles, broadly ovoid, angled, pubescent, purple; seeds large, creamcolored.

Native of Europe, often cultivated and occasionally adventive, as are some of its hybrids with allied European species. March-May. Viola chinensis L. (Viola lancifolia Pollard, not Thore), an Asiatic species, is spontaneous in botanical gardens at Washington, D. C., and elsewhere.

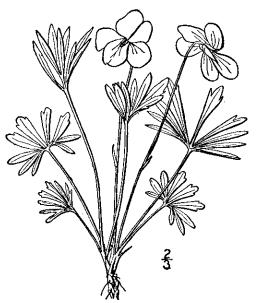
Viola pedàta L. Bird's-foot or Crowfoot Violet.

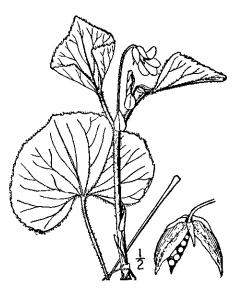
Viola pedata L. Sp. Pl. 933. 1753. Viola pedata var. bicolor Pursh; Raf. in DC. Prodr. 1: 291. 1824.

Nearly glabrous; rootstock short, erect; leaves 3-divided, the lateral divisions pedately 3-5-parted or -cleft, the segments linear to spatulate, often 2-4-cleft or -toothed near the apex; the leaves of early spring and of late autumn often smaller and less deeply dissected; corolla 3'-13' broad, the upper petals dark violet, the three lower lilac-purple, all beardless; the orange tips of the stamens large and conspicuous at the center of the flower; capsules green, glabrous; seeds copper-colored; apetalous flowers wanting, but petaliferous frequent in late summer and autumn.

In dry fields and open woods, Massachusetts to Minnesota, south to Florida and Louisiana.

Var. lineariloba DC, with all the petals of the same lilac-purple color is the more common form. Sand-, snake-, wood-, horse or horse-shoe violet. Pansy. Velvets. April-June.



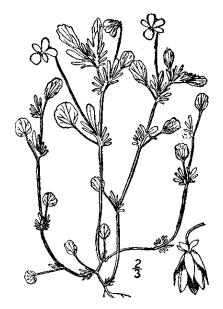


Viola pubéscens Ait. Hairy or Downy Yellow Violet.

Viola pubescens Ait. Hort. Kew. 3: 290. 1789.

Softly pubescent; stems mostly stout, 8'-12' high, often solitary; leaves either cauline, 2-4, near the summit, short-petioled, or occasionally a long-petioled root-leaf; blades broadly ovate or reniform, with cordate or truncate-decurrent base, crenate-dentate, somewhat pointed; stipules large, ovate-lanceolate; sepals narrowly lanceolate; petals bright yellow, the lateral bearded, the lower with short spur; capsules ovoid, 5"-6" long, ovoid-conic, glarous or sometimes woolly; seeds brown, 14" long.

Dry rich woods, Nova Scotia to Dakota, south, especially in the mountains, to Virginia and Missouri. Often intergrading with Viola eriocarpa. April-May.



Viola Rafinésquii Greene. Field Pansy.

Viola tenella Muhl. Cat. 26. 1813. Not Poiret. 1810. Viola Rafinesquii Greene, Pittonia 4: 9. 1899.

Glabrous, annual, with slender stem, 3'-8' high, often branched from the base; leaves small, the lowest 3"-5" wide, suborbicular, on slender petioles, the upper obovate to linear-oblanceolate, sparsely crenulate, attenuate at the base; stipules pectinately cut, the upper segment elongate, narrowly spatulate, mostly entire; internodes usually exceeding the leaves; flowers small, but the obovate bluish-white to cream-colored petals nearly twice the length of the lanceolate sepals; seeds light brown, a little more than ½" long.

In fields and open woods, New York to Michigan, south to Georgia and Texas. April-May. Field-violet.

Viola sagittàta Ait. Arrow-leaved Violet.

Viola sagittata Ait. Hort. Kew. 3: 287. 1789.

Usually glabrous, but the leaves often ciliate or finely pubescent throughout; petioles commonly longer than the blades; these lanceolate or oblong-lanceolate, becoming 1½-4′ long, cordate to truncate, obtuse or acute, distantly and obscurely toothed above the middle, hastately or sagittately toothed or cleft at the base; the earliest leaves and those produced in late summer often deltoid-ovate, obtuse, merely crenate at the base; flowers on peduncles as long as the leaves, or somewhat longer; corolla violet-purple; sepals narrowly lanceolate, acute, glabrous; capsules 4″-7″ long, containing 50-70 brown seeds.

Moist banks and wet meadows, Massachusetts to Minnesota, south to Georgia and Louisiana. The pubescent form, frequently found in the East, is the prevalent form in the region of the Great Lakes. Early blue, spade-leaf or sand-violet. April-May.

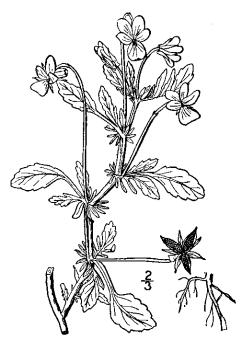


Viola trícolor L. Pansy. Lady's-delight. Heartsease.

Viola tricolor L. Sp. Pl. 935. 1753.

Glabrous or pubescent, 4'-12' high; stem angled and often branched; upper leaves oval or lanceolate, ½'-1' long, the lower ovate, often cordate, all crenate-serrate; stipules foliaceous, laciniate or lyrate-pinnatifid; flowers 8"-1' broad, variously colored with yellow, purple or white.

In waste places, sparingly escaped from gardens. May-July. Introduced from Europe. English names from 40 to 50, among which are johnny jump-up or johnny jumper, monkey's face, love-in-idleness, fancy, biddy's eyes, herb trinity, cats' faces, flamy, garden gate. Garden- or trinity-violet. Kisses. Kiss-me. Hearts'-pansy. Battle-field flower. Stepmother. Cupid's-delight. None-so-pretty. Usually more or less impure, the garden pansy being the product of frequent crosses of Viola tricolor with allied species of the Old World



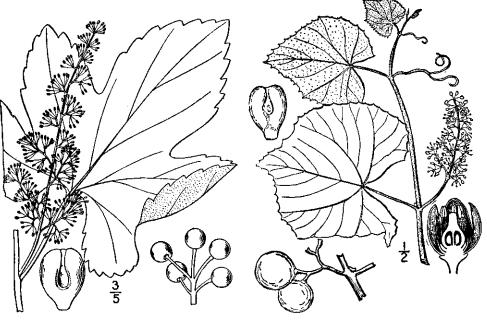
Britton & Brown Illustrated Flora - 2nd Edition (1913) - Volume II - Medicinal Plant excerpts Page 111
The Southwest School of Botanical Medicine http://www.swsbm.com

Vitis aestivàlis Michx. Summer Grape. Small Grape.

Vitis aestivalis Michx. Fl. Bor. Am. 2: 230. 1803.

High climbing, branches terete, the twigs and petioles pubescent; bark loose and shreddy; pith interrupted at the nodes. Leaves as large as those of *V. Labrusca*, dentate, or 3-5-lobed, floccose-woolly with whitish or rusty pubescence, especially when young, sometimes becoming nearly glabrous when mature; tendrils and flower-clusters intermittent (wanting opposite each third leaf); inflorescence generally long and loose; berries numerous, about 5" in diameter, black, with a bloom, acid, but edible; seeds 2-3, about 3" long; raphe narrow.

In thickets, southern New Hampshire to Florida, west to southern Ontario, Wisconsin, Kansas and Texas. Ascends to 3500 ft. in North Carolina. May-June. Fruit ripe Sept.—Oct.



Vitis Labrúsca L. Northern Fox- or Plum-grape. Wild Vine.

Vitis Labrusca L. Sp. Pl. 203. 1753.

Climbing or trailing, often ascending high trees, sometimes forming a stem a foot in diameter or more, the young twigs, forked tendrils, petioles and lower surfaces of the leaves densely rusty-pubescent, especially when young. Bark loose and separating in strips; nodes solid, interrupting the pith; leaves large, each opposite a forked tendril or a flower cluster, varying from merely dentate to deeply lobed with rounded sinuses; fertile flowers in compact panicles, the sterile looser; berries few, brownish-purple or yellowish, about 9" in diameter, strongly musky; seeds 3-6, about 4" long; raphe narrow.

Thickets, Vermont to Indiana, New York, Georgia and Tennessee. Recorded from Minnesota. The cultivated isabella, concord and catawba grapes have been derived from this species. Ascends to 2100 ft. in Virginia. May-June. Fruit ripe Aug.-Sept.

Vitis vulpina L. Riverside or Sweet Scented Grape.

Vitis vulpina L. Sp. Pl. 203. 1753. Vitis riparia Michx. Fl. Bor. Am. 2: 231. 1803. Vitis cordifolia var. riparia A. Gray, Man. Ed. 5, 113. 1867.

Climbing or trailing, glabrous throughout, or more or less pubescent on the veins of the lower surfaces of the leaves; branches rounded or slightly angled, greenish; pith interrupted, the diaphragm thin; tendrils intermittent. Leaves thin, shining, almost all sharply 3-7-lobed, the sinuses angular, the lobes acute or acuminate, the terminal one commonly long; stipules 2"-3" long, often persistent until the fruit is formed; inflorescence compact or becoming loose; berries bluish-black, with a bloom, 4"-5" in diameter, rather sweet; seeds 2-4, 2" long, the raphe narrow and inconspicuous.

Along rocky river-banks, New Brunswick to Manitoba, south to Maryland, West Virginia, Arkansas and Colorado. May-June. Fruit beginning to ripen in July or earlier, sometimes continuing until October. Winter-, frost-, bull- or Aroyo-grape.



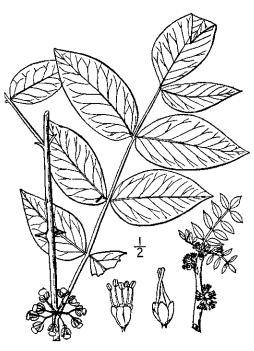
Xanthorhiza simplicissima Marsh.

Yellow-root.

X. apiifolia L'Her. Stirp. Nov. 79. 1784. Xanthorrhiza simplicissima Marsh. Arb. Amer. 168. 1785.

Glabrate, 1°-2° high, the bark and long roots yellow and bitter. Leaves pinnate or sometimes bipinnate, clustered at the summit of the short stem, the blade 5'-6' long, slender-petioled; leaflets 5, thin, 1'-3' long, incisely toothed, cleft or divided, sessile, ovate or oblong, acute, cuneate, shining; branches of the raceme or panicle slender, drooping, 2'-3' long; flowers about 2" broad, pedicelled, solitary or 2-3 together, brownish-purple; sepals ovate, acute; follicles 4-8, inflated, light yellow, 1-seeded, diverging, curved at the apex, minutely beaked.

In woods, southwestern New York to Kentucky and Florida. Also called Yellow-wood. The lowest leaves are sometimes 3-foliolate. Parsley-leaved yellow-root. April-May.



Zanthoxylum americànum Mill. Prickly Ash. Toothache-tree.

Xanthoxylum americanum Mill, Gard. Dict. Ed. 8, no. 2. 1768.

A shrub, or small tree, reaching a maximum height of about 25°, and a trunk diameter of 6'. Leaves alternate, oddpinnate, pubescent when young, becoming glabrous or nearly so when old; leaflets 3–11, ovate, opposite, dark green above, lighter beneath, nearly sessile, 1½'-2' long, crenulate or entire, acutish; flowers greenish, about 1½" broad, in sessile axillary cymes, borne on the wood of the previous season and appearing before the leaves; pedicels slender; calyx none; petals 4 or 5; pistils 2–5; follicles black, ellipsoid, about 2" long, on short stipes, 1–2-seeded.

In woods and thickets, Quebec to Virginia, especially along the mountains, west to western Ontario, South Dakota, Kansas and Nebraska. Wood soft, light brown; weight per cubic foot 35 lbs. Angelica-tree. Suterberry. April-May.

Zanthoxylum Clàva-Hérculis L. Southern Prickly Ash. Sea Ash. Pepper-wood.

Z. Clava-Herculis L. Sp. Pl. 270. 1753.

Z. carolinianum Lam. Encycl. 2: 39. 1786.

A small, very prickly tree, with a maximum height of 45° and trunk diameter of 9′, the prickles supported on cushions of cork sometimes 8′ broad. Leaves alternate odd-pinnate, glabrous, shining above, dull beneath; leaflets 5-19, obliquely ovate, nearly sessile, 1½′-3′ long, acute, crenulate; flowers greenish-white, in large terminal cymes, appearing before the leaves; sepals 4 or 5; petals 4 or 5; pistils 2 or 3; follicles about 2″ long, sessile.

Along streams, coast of southern Virginia to Florida, west to Texas and Arkansas. Wood light brown; weight per cubic foot 31 lbs. Hercules'-club. Prickly-yellowwood. Yellow prickly ash. Wild orange. June.



Zizia aurea (L.) Koch. Early or Golden Meadow-Parsnip.

Smyrnium aureum L. Sp. Pl. 262. 1753.

Z. aurea Koch, Nov. Act. Caes. Leop. 12: 129. 1825.Thaspium aureum var. apterum A. Gray, Man. Ed. 2. 156. 1856.

Zizia aurea obtusifolia Bissell, Rhodora 2: 225.

Erect, glabrous, branched, 1°-2½° high. Basal and lower leaves long-petioled, 2-3-ternately compound, the segments ovate, or ovate-lanceolate, acute, acuminate or obtusish at the apex, 1'-2' long, sharply serrate; upper leaves shorter-petioled, ternate; rays of the umbels 9-25, stout, ascending, 1'-2' long; fruit oblong, nearly 2" long, about 1½" wide.

In fields, meadows, and swamps, New Brunswick to Ontario, Saskatchewam, South Dakota, Florida and Texas. April-June. Golden alexanders. Wild parsley.

