

(*P. viscosa*, Gray, Man., not *L.*)—Light or sandy soils, Ont. and Minn. to Fla. and Tex.—Var. *ambigua*, Gray, is a coarse and very villous form with violet anthers. Wisc., and westward.

— — — Perennials, mostly low, not viscid; pubescence stellate or simple or nearly none; anthers almost always yellow.

6. *P. viscosa*, L. Cinereous or when young almost canescent with short stellate or 2-3-forked pubescence; stems ascending or spreading from slender creeping subterranean shoots; leaves ovate or oval, varying to oblong and obovate, entire or undulate; corolla greenish-yellow, with a more or less dark eye; fruiting calyx globose-ovate; berry yellow or orange.—In sands on and near the coast, Va. to N. C. and Fla.

7. *P. lanceolata*, Michx. More or less hirsute-pubescent with short stiff mostly simple hairs, varying to nearly glabrous; stems from rather stout subterranean shoots, angled, somewhat rigid; leaves oblong-ovate to narrowly lanceolate, sparingly angulate-toothed to undulate or entire; corolla ochroleucous, with a more or less dark eye; calyx commonly hirsute, in fruit pyramidal-ovate (1-1½ long); berry reddish. (*P. pennsylvanica*, Gray, Man., in part; not *L.*)—Dry open ground, Penn. to Ill., Minn., and south and westward.

Var. *laevigata*, Gray. Glabrous or almost so throughout, or with some very short hairs on young parts.—Neb. to Tex., and westward.

Var. *hirta*, Gray. A remarkable ambiguous form, with much of the hirsute-pubescent of the leaves 2-3-forked, as also are some of the abundant villous-hispid hairs of the stem.—Wet woods, Tex. to Mo., and E. Kan.

4. *NICÁNDRA*, Adans. APPLE OF PERU.

Calyx 5-parted, 5-angled, the divisions rather arrow-shaped, enlarged and bladder-like in fruit, enclosing the 3-5-celled globular dry berry. Corolla with border nearly entire. Otherwise much like *Physalis*.—An annual smooth herb (2-3° high), with ovate sinuate-toothed or angled leaves, and solitary pale blue flowers on axillary and terminal peduncles. (Named after the poet Nicander of Colophon.)

N. physaloides, Gaertn.—Waste grounds, near dwellings and old gardens. (Adv. from Peru.)

5. *LÝCIUM*, L. MATRIMONY-VINE.

Calyx 3-5-toothed or cleft, not enlarging, persistent at the base of the berry. Corolla funnel-form or salver-shaped, 5-lobed, the lobes imbricated and not plaited in the bud. Stamens 5; anthers opening lengthwise. Style slender; stigma capitate. Berry small, 2-celled. Shrubby, often spiny plants, with alternate and entire small leaves, and mostly axillary small flowers. (Named from the country, *Lycia*.)

L. vulgare, Dunal. (COMMON M.) Shrub with long sarmentose recurved-drooping branches, smooth, sparingly if at all spiny; leaves oblong- or spatulate-lanceolate, often fascicled, narrowed into a short petiole; flowers on slender peduncles fascicled in the axils; corolla short funnel-form, greenish-purple; style and slender filaments equalling its lobes; berry oval, orange-red.—About dwellings, and escaped into waste grounds in Penn., etc. (Adv. from Eu.)

6. *HYOSCÝAMUS*, Tourn. HENBANE.

Calyx bell-shaped or urn-shaped, 5-lobed. Corolla funnel-form, oblique, with a 5-lobed more or less unequal plaited border. Stamens declined. Capsule

enclosed in the persistent calyx, 2-celled, opening transversely all round near the apex, which falls off like a lid.—Clammy-pubescent, fetid, narcotic herbs, with lurid flowers in the axils of angled or toothed leaves. (Name composed of *ús*, *ús*, a hog, and *kápos*, a bean; said to be poisonous to swine.)

H. niger, L. (BLACK HENBANE.) Biennial or annual; leaves clasping, sinuate-toothed and angled; flowers sessile, in one-sided leafy spikes; corolla dull yellowish, strongly reticulated with purple veins.—Escaped from gardens to roadsides. (Adv. from Eu.)

7. *DATÚRA*, L. JAMESTOWN-WEED. THORN-APPLE.

Calyx prismatic, 5-toothed, separating transversely above the base in fruit, the upper part falling away. Corolla funnel-form, with a large and spreading 5-10-toothed plaited border. Stigma 2-lipped. Capsule globular, prickly, 4-valved, 2-celled, with 2 thick placenta projected from the axis into the middle of the cells, and connected with the walls by an imperfect false partition, so that the capsule is 4-celled except near the top, the placenta as if on the middle of these false partitions. Seeds rather large, flat.—Rank weeds, narcotic-poisonous, with ovate leaves, and large showy flowers on short peduncles in the forks of the branching stem; produced all summer and autumn. (Altered from the Arabic name, *Tutorah*.)

D. stramonium, L. (COMMON STRAMONIUM or THORN APPLE.) Annual, glabrous; leaves ovate, sinuate-toothed or angled; stem green; corolla white (3' long), the border with 5 teeth; lower prickles of the capsule mostly shorter.—Waste grounds; a well-known ill-scented weed. (Adv. from Asia?)

D. tatula, L. (PURPLE T.) Mostly taller; stem purple; corolla pale violet-purple; prickles of the capsule nearly equal.—Waste grounds, in the Atlantic States. (Adv. from trop. Amer.)

8. *NICOTIÁNA*, Tourn. TOBACCO.

Calyx tubular-bell-shaped, 5-cleft. Corolla funnel-form or salver-form, usually with a long tube; the plaited border 5-lobed. Stigma capitate. Capsule 2-celled, 2-4-valved from the apex. Seeds minute.—Rank acrid-narcotic herbs, mostly clammy-pubescent, with ample entire leaves, and racemed or panicled flowers. (Named after *John Nicot*, who was thought to have introduced Tobacco (*N. tabacum*, L.) into Europe.)

N. rustica, L. (WILD TOBACCO.) Annual; leaves ovate, petioled; tube of the dull greenish-yellow corolla cylindrical, two thirds longer than the calyx, the lobes rounded.—Old fields, from N. Y. westward and southward; a relic of cultivation by the Indians. (Of unknown nativity.)

ORDER 75. SCROPHULARIACEÆ. (FIGWORT FAMILY.)

Chiefly herbs (rarely trees), with didynamous stamens (or perfect stamens often only 2, rarely 5) inserted on the tube of the 2-lipped or more or less irregular corolla, the lobes of which are imbricated in the bud; fruit a 2-celled and usually many-seeded capsule, with the placenta in the axis; seeds anatropous, or amphitropous, with a small embryo in copious albumen.—Style single; stigma entire or 2-lobed. Leaves and inflorescence various; but the flowers not terminal in any genuine representatives of the order.—A large order of bitterish plants, some of them narcotic-poisonous.

I. *ANTIRRHINIDÆ*. Upper lip or lobes of the corolla covering the lower in the bud (with occasional exceptions in *Mimulus*, etc.) Capsule usually septical.

Tribe I. VERBASCEÆ. Corolla rotate. Flowers racemose. Leaves alternate.

1. **Verbascum.** Stamens 5, all with anthers, and 3 or all with bearded filaments.

Tribe II. ANTIRRHINEÆ. Corolla tubular, with a spur or sac at the base below, the throat usually with a palate. Capsule opening by chinks or holes. Flowers in simple racemes or axillary. Lower leaves usually opposite or whorled. Stamens 4.

2. **Linaria.** Corolla spurred at base; the palate seldom closing the throat.

3. **Antirrhinum.** Corolla merely saccate at base; the palate closing the throat.

Tribe III. CHELONEÆ. Corolla tubular, or 2-lipped, not spurred nor saccate below. Capsule 2-4-valved. Leaves opposite. Inflorescence usually compound, of small axillary spiked or racemed or umbel-like clusters or cymes, or when reduced to a single flower the peduncle mostly 2-bracteate. Stamens 4, and usually a rudiment of the fifth.

4. **Scrophularia.** Corolla inflated, globular or oblong, with four erect lobes and one spreading one. Rudiment of the sterile stamen a scale on the upper lip.

5. **Collinsia.** Corolla 2-cleft, the short tube saccate on the upper side; the middle lobe of the lower lip sac-like and enclosing the declined stamens.

6. **Chelone.** Corolla tubular inflated above. Sterile stamen shorter than the others. Anthers very woolly. Seeds winged.

7. **Pentstemon.** Corolla tubular. Sterile stamen about as long as the rest. Seeds wingless.

Tribe IV. GRATIOLEÆ. Corolla tubular, not saccate nor spurred. Capsule 2-valved. Flowers solitary in the axils of bracts or leaves; peduncles naked (or 2-bracteolate in n. 12). Leaves all or the lower ones opposite. No trace of a fifth stamen.

* Stamens 4, all anther-bearing and similar.

8. **Mimulus.** Calyx prismatic, 5-angled, 5-toothed. Corolla elongated.

9. **Conoclinium.** Calyx 5-parted, the divisions equal. Corolla short.

10. **Herpestis.** Calyx 5-parted, unequal, the upper division largest. Corolla short.

11. **Limosella.** Calyx 5-toothed. Corolla open bell-shaped, 5-cleft, nearly regular. Leaves alternate or fascicled, fleshy. Dwarf aquatic or marsh plant.

** Anther-bearing stamens 2; usually also a pair of sterile filaments.

12. **Gratiola.** Calyx 5-parted. Stamens included; the sterile pair short or none.

13. **Oxyanthes.** Calyx 5-parted. Stamens included; the sterile filaments protruded.

14. **Micranthemum.** Flowers minute. Calyx 4-toothed or cleft. Upper lip of corolla short or none. Filaments with an appendage; sterile pair none. Dwarf aquatic.

II. RHINANTHIDEÆ. Under lip or the lateral lobes of the corolla covering the upper in the bud. Capsule commonly loculicidal.

Tribe V. DIGITALEÆ. Corolla wheel-shaped, salver-shaped, or bell-shaped. Stamens 2 or 4, not approaching in pairs nor strongly didynamous; anthers 2-celled.

15. **Synthyris.** Calyx 4-parted. Corolla bell-shaped, 2-4-lobed, irregular. Stamens 2 or 4. Leaves alternate. Flowers racemed.

16. **Veronica.** Calyx 4-(rarely 3-5-) parted. Corolla wheel-shaped or salver-shaped, almost regular. Stamens 2. Leaves chiefly opposite or whorled. Flowers racemed.

Tribe VI. GERARDIEÆ. Corolla with a spreading and slightly unequal 5-lobed limb. Stamens 4, approximate in pairs. Leaves opposite, or the uppermost alternate.

* Corolla salver-shaped. Anthers 1-celled. Flowers in a spike.

17. **Buchnera.** Calyx tubular, 5-toothed. Limb of the elongated corolla 5-cleft.

** Corolla bell-shaped to funnel-form; anthers 2-celled.

18. **Seymeria.** Stamens nearly equal. Tube of the corolla broad, not longer than the lobes.

19. **Gerardia.** Stamens strongly unequal, included.

Tribe VII. EUPHRASIEÆ. Corolla tubular, obviously 2-lipped; the upper lip narrow, erect or arched, enclosing the 4 usually strongly didynamous stamens.

* Anther-cells unequal and separated. Capsule many-seeded.

20. **Castilleja.** Calyx tubular, cleft down the lower, and often also on the upper, side. Upper lip of corolla elongated; the lower short, often very small.

21. **Orthocarpus.** Calyx tubular-campanulate, 4-cleft. Upper lip of corolla little longer and usually much narrower than the inflated lower one.

** Anther-cells equal. Capsule many-several-seeded.

22. **Schwalbea.** Calyx 5-toothed, very oblique, the upper tooth much the smallest.

23. **Euphrasia.** Calyx 4-cleft. Upper lip of the corolla 2-lobed, and sides folded back. Capsule oblong.

24. **Bartsia.** Calyx 4-cleft. Upper lip of corolla entire and sides not folded back.

25. **Rhinanthus.** Calyx inflated, ovate. Capsule orbicular; seeds winged.

26. **Pedicularis.** Calyx not inflated. Capsule ovate or sword-shaped; seeds wingless.

*** Anther-cells equal. Capsule 1-4-seeded.

27. **Melampyrum.** Calyx 4-cleft. Ovary 2-celled, 4-ovuled. Capsule flat, oblique.

1. VERBASCUM, L. MULLEIN.

Calyx 5-parted. Corolla 5-lobed, open or concave, wheel-shaped; the lobes broad and rounded, a little unequal. Stamens 5, all the filaments, or the 3 upper, woolly. Style flattened at the apex. Capsule globular, many-seeded. — Tall and usually woolly biennial herbs, with alternate leaves, those of the stem sessile or decurrent. Flowers in large terminal spikes or racemes, ephemeral; in summer. (The ancient Latin name, altered from *Barbascum*.)

V. THAPSUS, L. (COMMON MULLEIN.) *Densely woolly throughout; stem tall and stout, simple, winged by the decurrent bases of the oblong acute leaves; flowers (yellow, very rarely white) in a prolonged and very dense cylindrical spike; lower stamens usually beardless.* — Fields, a common weed. (Nat. from Eu.)

V. BLATTARIA, L. (MOTH M.) *Green and smoothish, slender; lower leaves petioled, oblong, doubly serrate, sometimes lyre-shaped, the upper partly clasping; raceme loose; filaments all bearded with violet wool.* — Roadsides, throughout our range. Corolla either yellow, or white with a tinge of purple. (Nat. from Eu.)

V. LYCHNITIS, L. (WHITE M.) *Clothed with thin powdery wooliness; stem and branches angled above; leaves ovate, acute, not decurrent, greenish above; flowers (yellow, rarely white) in a pyramidal panicle; filaments with whitish wool.* — Fields, N. Atlantic States, rather rare. (Adv. from Eu.)

2. LINARIA, Tourn. TOAD-FLAX.

Calyx 5-parted. Corolla personate, with the prominent palate often nearly closing the throat, spurred at base on the lower side. Stamens 4. Capsule thin, opening below the summit by one or two pores or chinks. Seeds many. — Herbs, with at least all the upper leaves alternate (in ours), fl. in summer. (Name from *Linum*, the Flax, which the leaves of some species resemble.)

* *Slender glabrous annual or biennial; leaves linear, entire and alternate (or smaller, oblong, and opposite on procumbent shoots); small blue flowers in a naked terminal raceme.*

1. **L. Canadensis, Dumont.** Flowering stems nearly simple (6-30' high); leaves flat (1-2" wide); pedicels erect, not longer than the filiform curved spur of the corolla. — Sandy soil, common.

** *Perennial, erect (1-3' high), glabrous, with narrow entire and alternate pale leaves, and yellow flowers in a terminal raceme.*

L. VULGARIS, Mill. (RAMSTED. BUTTER AND EGGS.) Leaves linear or nearly so, extremely numerous; raceme dense; corolla 1' long or more, including the slender subulate spur; seeds winged. — Fields and roadsides, throughout our range. (Nat. from Eu.)

L. GENISTIFOLIA, Mill. Glaucons, paniculately branched; leaves lanceolate, acute; flowers smaller and more scattered; seeds wingless. — Sparingly naturalized near New York. (Nat. from Eu.)

* * * Annual, procumbent, much branched, with broad petioled veiny alternate leaves, and small purplish and yellow flowers from their axils.

L. ELATINE, Mill. Spreading over the ground, slender, hairy; leaves hastate or the lower ovate, much surpassed by the filiform peduncles; calyx-lobes lanceolate, acute; corolla 3-4" long, including the subulate spur. — Sandy banks and shores, Canada to N. C., rather rare. (Nat. from Eu.)

L. SPURIA, Mill. Like the preceding, but with roundish or cordate leaves and ovate or cordate calyx-lobes. — Occasionally occurs on ballast or waste grounds near cities. (Nat. from Eu.)

3. ANTIRRHINUM, Tourn. SNAPDRAGON.

Corolla saccate at the base, the throat closed by the large bearded palate. Seeds oblong-truncate. Otherwise nearly as *Linaria*. — Corolla commonly showy, resembling the face of an animal or a mask; whence the name (from *ἀντί*, like, and *πίρ*, a snout.) Fl. summer and autumn.

A. ORONTIUM, L. A small-flowered annual or biennial, low, erect; leaves lance-linear; spike loose, leafy; sepals longer than the purplish or white corolla. — About gardens and old fields in Atlantic States. (Adv. from Eu.)

A. MAJUS, L. (LARGE SNAPDRAGON.) A large-flowered perennial, with oblong smooth leaves and a glandular-downy raceme; sepals short; corolla 1½-2" long, purple or white. — Eastward, escaping from gardens. (Adv. from Eu.)

4. SCROPHULARIA, Tourn. FIGWORT.

Calyx deeply 5-cleft. Corolla with a somewhat globular tube; the 4 upper lobes of the short border erect (the two upper longer), the lower spreading. Stamens 4, declined, with the anther-cells transverse and confluent into one; the fifth stamen a scale-like rudiment at the summit of the tube of the corolla. Capsule many-seeded. — Rank herbs, with mostly opposite leaves, and small greenish-purple or lurid flowers in loose cymes, forming a terminal narrow panicle. (So called because a reputed remedy for *scrofula*.)

1. **S. nodosa**, L., var. **Marilandica**, Gray. Smooth perennial (3-5° high); stem 4-sided; leaves ovate, oblong, or the upper lanceolate, acuminate, cut-serrate, rounded or rarely heart-shaped at base. — Damp grounds, N. Eng. to Fla., west to the Rocky Mts. (Eu., Asia, the type.)

5. COLLINSIA, Nutt.

Calyx deeply 5-cleft. Corolla declined, with the tube saccate or bulging at the base on the upper side, deeply 2-lipped; the upper lip 2-cleft, its lobes partly turned backward, the lower 3-cleft, its middle lobe keeled and sac-like, enclosing the 4 declined stamens and style. Fifth stamen a gland-like rudiment. Capsule 4-many-seeded. — Slender branching annuals or biennials, with opposite leaves, and handsome party-colored flowers in umbel-like clusters, appearing whorled in the axils of the upper leaves. (Dedicated to the late *Zaccheus Collins*, of Philadelphia, an accurate botanist.)

1. **C. verna**, Nutt. Slender (6-20' high), lower leaves ovate, the upper ovate-lanceolate, clasping by the heart-shaped base, toothed; whorls about 6-flowered; flowers long-peduncled; corolla (blue and white) twice the length of the calyx. — Moist soil. western N. Y. to W. Va., Wisc. and Ky. May, June.

2. **C. parviflora**, Dougl. Small; lower leaves ovate or rounded, the upper oblong-lanceolate, mostly entire; whorls 2-6-flowered; flowers short-peduncled; the small (blue) corolla scarcely exceeding the calyx. — Shore of L. Superior, N. Mich., and westward.

6. CHELONE, Tourn. TURTLE-HEAD. SNAKE-HEAD.

Calyx of 5 distinct imbricated sepals. Corolla inflated-tubular, with the mouth a little open; upper lip broad and arched, keeled in the middle, notched at the apex; the lower woolly-bearded in the throat, 3-lobed at the apex, the middle lobe smallest. Stamens 4, with woolly filaments and very woolly heart-shaped anthers, and a fifth sterile filament smaller than the others. Seeds many, wing-margined. — Smooth perennials, with upright branching stems, opposite serrate leaves, and large white or purple flowers, which are nearly sessile in spikes or clusters, and closely imbricated with round-ovate concave bracts and bractlets. (Name from *χελώνη*, a tortoise, the corolla resembling in shape the head of a reptile.)

1. **C. glabra**, L. A foot or two (or even 6-7°) high; leaves narrowly to rather broadly lanceolate (4-5' long, 4-12" wide), gradually acuminate, serrate with sharp appressed teeth, narrowed at base usually into a very short petiole; bracts not ciliate; corolla white, or barely tinged with rose. — Wet places, Newf. to Minn., south to Fla. and Tex.

2. **C. obliqua**, L. Less strict or with spreading branches, 1-2° high; leaves broadly lanceolate to oblong (2-5' long), sometimes laciniately serrate, more veiny and duller, acute or obtuse at base, mostly short-petioled; bracts ciliate; corolla deep and bright rose-color. — S. Ill. to Va. and Fla.

7. PENTSTEMON, Mitchell. BEARD-TONGUE.

Calyx 5-parted. Corolla tubular and more or less inflated, or bell-shaped, either decidedly or slightly 2-lipped; the upper lip 2-lobed, and the lower 3-cleft. Stamens 4, declined at the base, ascending above, and a fifth sterile filament usually as long as the others, either naked or bearded. Seeds numerous, wingless. — Perennials, branched from the base, simple above, with opposite leaves, the upper sessile and mostly clasping. Flowers mostly showy, thyrsoid or racemose-panicled. (Name from *πέντε*, five, and *στέμον*, stamen, the fifth stamen being present and conspicuous, although sterile.)

* Viscid or glandular above, more or less pubescent or glabrous below; leaves often toothed or denticulate.

+ Thyrses somewhat open; leaves ovate-lanceolate to linear; corolla 9-12" long, the lower lip usually bearded within.

1. **P. pubescens**, Solander. Stem 1-2° high, viscid-pubescent (at least the inflorescence); leaves oblong to lanceolate (2-4' long), the lowest and radical ovate or oblong, usually denticulate; thyrses narrow; corolla dull violet or purple (or partly whitish), very moderately dilated, the throat nearly closed by a villous-bearded palate; sterile filament densely bearded. — Dry or rocky grounds, S. Maine (Miss Furbish) to Minn., south to Fla. and Tex.

2. **P. lævigatus**, Solander. Stem 2-4° high, mostly glabrous except the inflorescence; leaves firmer, somewhat glossy, the cauline ovate- or oblong-

lanceolate with subcordate clasping base (2-5' long); thyrses broader; corolla white (commonly tinged with purple), abruptly and broadly inflated, the throat widely open; sterile filament thinly bearded above. — Moist or rich soil, Penn. to Fla. and westward, where the common form is

Var. *Digitalis*, Gray. Stem sometimes 5' high; corolla larger and more abruptly inflated, white. (*P. Digitalis*, Nutt.) — Penn. to Iowa, Mo., Ark., etc.

3. *P. gracilis*, Nutt. Glabrous or puberulent, viscid-pubescent above, 1' high or less; stem-leaves mostly linear-lanceolate, the radical spatulate or oblong; corolla tubular-funnel-form or nearly cylindrical with open throat, lilac-purple or whitish. — Minn. to Mo., and westward.

+ + Thyrses raceme-like. All extreme western.

4. *P. Cobaea*, Nutt. Soft-puberulent, 1' high; leaves ovate or oblong, or the lower broadly lanceolate and the upper cordate-clasping, mostly sharply toothed; thyrses short; corolla 2' long, broadly ventricose, dull purple or whitish. — Prairies, Kan. to Tex.

5. *P. tubiflorus*, Nutt. Wholly glabrous excepting the viscid ovate sepals, 2-3' high; leaves oblong or ovate-lanceolate, entire or sparsely toothed, the floral shorter than the remote dense clusters of the virgate thyrses; corolla 9" long, the narrow tube gradually dilated upward, white or whitish. — Low prairies, Kan. and Ark.

6. *P. albidus*, Nutt. Viscid-pubescent, 6-10' high; leaves oblong-lanceolate or narrow, entire or sparsely toothed; clusters of the strict thyrses few-flowered, approximate; sepals lanceolate, densely pubescent; corolla 9" long, with shorter tube and more dilated throat. — Plains, Neb. to S. Dak. and Tex.

* * Glabrous throughout and glaucous; leaves sessile, entire; thyrses raceme-like.

7. *P. grandiflorus*, Nutt. Stem 2-4' high; leaves thickish, the upper and floral rounded, all but the obovate radical ones clasping or perfoliate; pedicels short; corolla 2' long, oblong-campanulate, nearly regular, lilac or lavender-blue; sterile filament hooked and minutely bearded at the apex. — Prairies, from Ill. and Wisc. to the Dakotas, Neb., and Kan.

8. *P. glaber*, Pursh. Stems 1-2' high; leaves mostly oblong-lanceolate or the upper ovate-lanceolate; thyrses elongated, the peduncles and pedicels very short; corolla 1-1½' long, bright blue to violet-purple, dilated above; anthers and apex of sterile filament glabrous or sparsely hirsute. — Plains of E. Neb. to S. Dak., and westward.

9. *P. acuminatus*, Dougl. Stem 6-20' high, stout; leaves thick, the lower obovate or oblong, the upper lanceolate to broadly ovate or cordate-clasping, acute or acuminate; thyrses leafy below, very narrow; corolla 9" long, lilac or violet; sterile filament mostly bearded above. — Kan. to Minn., and westward.

8. MIMULUS, L. MONKEY-FLOWER.

Calyx prismatic, 5-angled, 5-toothed, the upper tooth largest. Corolla tubular; upper lip erect or reflexed-spreading, 2-lobed; the lower spreading, 3-lobed. Stamens 4. Stigma 2-lobed, the lobes ovate. Seeds numerous. — Herbs, with opposite leaves, and mostly handsome flowers on solitary axillary and bractless peduncles. (Diminutive of *mimus*, a buffoon, from the grinning corolla.)

* Erect from a perennial root, glabrous; leaves feather-veined; corolla violet-purple.

1. *M. ringens*, L. Stem square (1-2' high); leaves oblong or lanceolate, pointed, clasping by a heart-shaped base, serrate; peduncles longer than the flower; calyx-teeth taper-pointed, nearly equal; corolla personate. — Wet places, N. Eng. to Minn., and southward; common. July-Sept. — Flower 1-1½' long, rarely white.

2. *M. alatus*, Ait. Stem somewhat winged at the angles; leaves oblong-ovate, tapering into a petiole; peduncles shorter than the calyx, which has very short abruptly pointed teeth; otherwise like the last. — Wet places, western N. Eng. to Ill., south to N. C. and Tex.

* * Leaves several-nerved and veiny, dentate, the upper sessile and clasping; calyx oblique, the upper tooth longest; corolla yellow, the lower lip bearded.

3. *M. Jamesii*, Torr. Diffusely spreading, smooth or smoothish; stems creeping at base; stem-leaves roundish or kidney-shaped, nearly sessile, equaling the peduncles; calyx ovate, inflated in fruit; throat of corolla broad and open. — In water or wet places, usually in springs, N. Mich. and Minn. to Ill., Kan., and westward.

M. luteus, L. Erect or with later branches spreading; leaves ovate to roundish or subcordate; corolla deep yellow, with brown-purple dots or blotches, often large. — Wet meadows, Norfolk, Ct. (Adv. from Calif.)

9. CONOBEA, Aublet.

Calyx 5-parted, equal. Upper lip of corolla 2-lobed, the lower 3-parted. Stamens 4, fertile; anthers approximate. Stigma 2-lobed, the lobes wedge-form. Seeds numerous. — Low branching herbs, with opposite leaves, and small solitary flowers on axillary peduncles. (Name unexplained.)

1. *C. multifida*, Benth. Annual, diffusely spreading, much branched, minutely pubescent; leaves petioled, pinnately parted, divisions linear-wedge-shaped; peduncles naked; corolla (greenish-white) scarcely longer than the calyx. — Along streams and shores, Ohio to Ill., Ark., and Tex.; also adv. below Philadelphia. July-Sept.

10. HERPËSTIS, Gaertn. f.

Calyx 5-parted; the upper division broadest, the innermost often very narrow. Upper lip of the corolla entire, notched or 2-cleft, and the lower 3-lobed, or the limb nearly equally 5-lobed. Stamens 4, all fertile. Style dilated or 2-lobed at the apex. Seeds numerous. — Low herbs, with opposite leaves, and solitary axillary flowers; in summer; ours rather succulent perennials. (Name from *ἑρπῆστις*, a creeping thing, the species being chiefly procumbent.)

* Corolla plainly bilabiate, the 2 upper lobes united to form the upper lip; leaves many-nerved.

1. *H. nigræscens*, Benth. Erect or ascending, very leafy, glabrous; leaves pinnately veined, oblong to cuneate-lanceolate (1-2' long), serrate; pedicels equalling and the upper surpassing the leaves; corolla whitish or purplish. — Wet places, Md. and N. C. to Tex., along and near the coast.