

Hairy; blades lanceolate or ovate; flowers in terminal and subterminal globose clusters, the clusters sometimes continuous in spikes; calyx 2-lipped, upper lip much the longer; corolla white or bluish, with purple spots, 2-lipped, 1-1.5 cm long; stamens 2, ascending under the erect concave entire upper lip, exerted; pollen-sacs divergent.

- a Blades of flowering stem narrowed to base, sessile or nearly so; teeth of lower calyx-lip reaching base of teeth of upper lip or beyond. 1. *B. ciliata*
- a' Blades of flowering stem rounded or cordate at base, petioled; teeth of lower calyx-lip not reaching so far as base of teeth of upper lip. 2. *B. hirsuta*

1. *Blephilia ciliata* (L.) Benth.

Downy Woodmint

Stem hairs recurved; leaves lanceolate, sessile or short petioled; flowers in crowded many-flowered clusters; calyx bilabiate; corolla purplish with darker purple spots; stamens 2, exerted.

REFERENCES: Sullivant 1840:35 (*Blephilia ciliata* Raf.); Selby & Craig 1890:14 (*Blephilia ciliata* Raf.); Cooperrider 1995:406 (illus. p. 407).

HERBARIUM RECORDS: 1840—Cols., Sullivant; 1 Jul 1891—Big Darby Creek, Selby (OS, WOOS); 1 Jul 1891—Georgesville, Werner (CLM); 5 Jun 1895—Cols., W. Kellerman; 22 Jun 1897—Cols., Osburn.

2. *Blephilia hirsuta* (Pursh) Benth.

Hairy Woodmint

Stem hairs spreading; leaves ovate, with petioles 1-3 cm long; flowers crowded in many-flowered clusters; calyx bilabiate; corolla white with purple spots; stamens 2, exerted.

REFERENCES: Riddell 1834:157 (*Monarda hirsuta*); Craig 1890:96 (in the E part of the woods near the fence, but not so common as *Monarda fistulosa*, 19 Jul 1882); Selby & Craig 1890:14; Cooperrider 1995:406 (illus. p. 407).

HERBARIUM RECORDS: 19 Jul 1882—Haydens Falls, Devol; Jul 1888—OSU woods, Cols., Craig; 1891—Wyandot Grove, Selby; 9 Jul 1892—Cols. & Franklin Co., Bogue; 14 Jul 1893—near Scioto, Cols., Selby; 3 Jul 1982—Blendon Woods, jct. of Brookside & Cherry Ridge trails, Owens; 3 Jul 1987—Highbanks Metro Park (Delaware Co.), mound bottom, Higgins; 16 Aug 1987—Highbanks Metro Park (Delaware Co.), woods, Witsberger 954; 6 Aug 1988—Highbanks Metro Park (Delaware Co.), woods edge, Higgins (OS, OWU).

25. SALVIA L. Sage

Leaves ovate to linear; flowers in whorls in axils of bracts, the clusters in terminal spikes or racemes; calyx 2-lipped; corolla 2-lipped, lower lip sometimes much the longer; anther-bearing stamens 2; anther-connectives long, the half-anther on lower end absent or vestigial.

There are many color varieties of *Salvia splendens* Ker Gawl. (Scarlet Sage) cultivated in gardens.

- a Corolla scarlet, about 4 cm long; calyx scarlet. *S. splendens*
- a' Corolla blue, less than 4 cm long.
- b Flowers 1-4 at a node; corolla-tube not longer than calyx. 1. *S. reflexa*
- b' Flowers 6 or more at a node; corolla-tube longer than calyx. 2. *S. pitcheri*

1. †*Salvia reflexa* Hornem.

Rocky Mountain Sage

Stems minutely pubescent; leaves petiolate, blades reaching 5 cm long; flowers in few-flowered verticils, forming a terminal spicate raceme; calyx bilabiate, pubescent only on the nerves; corolla zygomorphic, blue, scarcely exceeds length of calyx; stamens 2.

REFERENCE: Cooperrider 1995:404 (illus. p. 399).

HERBARIUM RECORDS: 12 Jun 1901—Cols., roadside, W. Kellerman; Sep 1911—Cols., weed in back yard along alley, J. H. Schaffner.

2. **Salvia pitcheri* Torr.

Blue Sage

Adventive (native to plains W of Ohio)

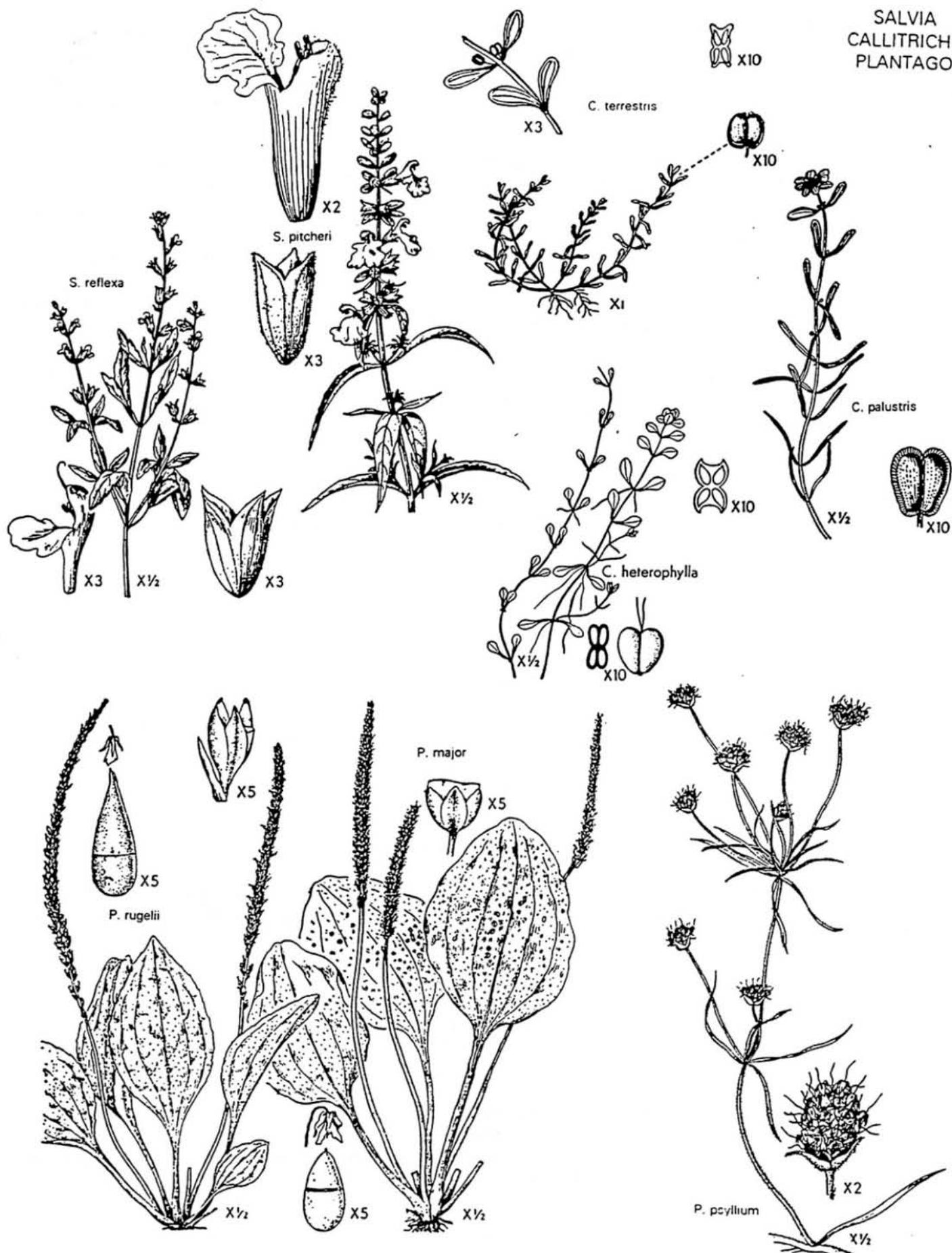
Stems minutely pubescent; leaves petiolate, 3-12 cm long, tapering; flowers in few-flowered verticils, forming a terminal spicate raceme; calyx bilabiate, densely pubescent throughout; corolla zygomorphic; stamens 2. Syn.: *S. azurea* Lam. var. *grandiflora* Benth.

REFERENCE: Cooperrider 1995:403.

HERBARIUM RECORD: 17 Sep 1941—Cook Rd., N Cols., probably escaped from cultivation, Roller.

CALLITRICHACEAE, Water Starwort Family

SALVIA
CALLITRICHE
PLANTAGO



1. CALLITRICHE L. Water Starwort

Small herbs growing in mud or submersed in water with floating rosettes of leaves at stem tips; leaves opposite; monoecious; flowers minute, in leaf axils, hypogynous, monosporangiate; the two kinds usually in different axils; perianth absent; flower subtended by 2 small bracts; stamen 1; carpels 2, united; styles 2, filiform; ovary 4-loculed by growth of false septum in each carpel; fruit separating into 4 one-seeded portions. Mature fruit is necessary for identification.

- a Fruit wider than long, somewhat stalked, the lobes separated by a deep groove, each with 2 sharp edges; styles shorter than fruit; terrestrial; leaves oblanceolate, 3-nerved, of uniform shape. 1. *C. terrestris*
- a' Fruit sessile; aquatic or terrestrial; submersed leaves linear, floating leaves obovate to spatulate with rounded summit; leaves and stems with minute scales.
 - b Fruit about as long as wide, obovoid to nearly circular, all margins rounded, both grooves shallow; styles as long as or longer than fruit. 2. *C. heterophylla*
 - b' Fruit longer than wide, obovoid or ellipsoid; carpels with sharp margins, separated by wide V-shaped groove on the broad side, by a shallow groove on the edge; styles shorter than fruit. 3. *C. palustris*

1. †*Callitriche terrestris* Raf.

Terrestrial Water-Starwort

Plant terrestrial; fruit short peduncled, wider than long. Syn.: *C. deflexa* A. Br. var. *austini* (Engelm.) Hegelm. REFERENCES: Stuckey & Roberts 1977:35 (Franklin Co. record neither previous to 1900 nor since 1950; mudflat—exposed soil conditions that were formerly covered with water earlier in the growing season); McCance 1984:A-249 (plant with historical pre-1960 records only); Cooperrider 1995:55 (illus. p. 56).

HERBARIUM RECORDS: 31 May 1922—Jackson Twp., *J. H. Schaffner*, 27 May 1929—Cabin Cave, Franklin Co., *Gordon*.

2. *Callitriche heterophylla* Pursh

Larger Water-Starwort

Plant aquatic; leaves floating to submersed; fruit sessile, about as long as wide; margins of mature carpels rounded, widest above the middle; styles longer than fruit.

REFERENCE: Cooperrider 1995:55 (illus. p. 56).

HERBARIUM RECORDS: 5 May 1929—Barnes Pond, abundant, Westerville, *Hicks*; 4 Jun 1931—Rd. SW of Westerville, *Hicks*; 4 Jun 1931—Pond SW of Westerville, *Hicks*; 5 Jun 1931—2 mi. SW of Westerville, *Hicks*.

3. †*Callitriche palustris* L.

Vernal Water-Starwort

Syn.: *C. verna* L.

REFERENCES: Stuckey & Roberts 1977:35 (Franklin Co. record neither previous to 1900 nor since 1950; pond & stream—quiet, open water & flowing water); Roberts & Cooperrider 1982:58.

NOTE: No specimens seen from Franklin Co. Not mapped for Franklin Co. by Cooperrider 1995:55 (illus. p. 56). Probably the above references were based on M. Roberts's misidentification of a *Callitriche heterophylla* specimen collected by Lawrence E. Hicks at Westerville on 5 May 1929.

PLANTAGINACEAE, Plantain Family

1. PLANTAGO L. Plantain

Herbs; leaves all basal or rarely cauline, usually entire, longitudinally ribbed; flowers bisporangiate or sometimes monosporangiate, hypogynous, sessile; corolla regular, tubular, 4- or rarely 3-lobed, dry-scarious, persistent on capsule; stamens 4 or rarely 2, on corolla; carpels 2, united; ovary 2-loculed; ovules 1-many in each locule; style and stigma 1; fruit a pyxis.

- a Leaves opposite or whorled on aerial stem; blades linear; flowers in axillary peduncled heads. 1. *P. psyllium*
- a' Leaves all in basal rosettes; flowers in spikes or heads on scapes.
 - b Blades linear; plants more or less villous throughout; bracts conspicuous, much longer than flowers. 7. *P. aristata*
 - b' Blades lanceolate or wider.
 - c Corolla lobes erect above fruit; scapes long-villous. 6. *P. virginica*
 - c' Corolla lobes spreading; scapes not or rarely villous.
 - d Blades lanceolate, strongly ribbed; bracts with wide hyaline tip and margin; the 2 sepals next to bract united; spike short-cylindric, conic when young. 5. *P. lanceolata*