

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)

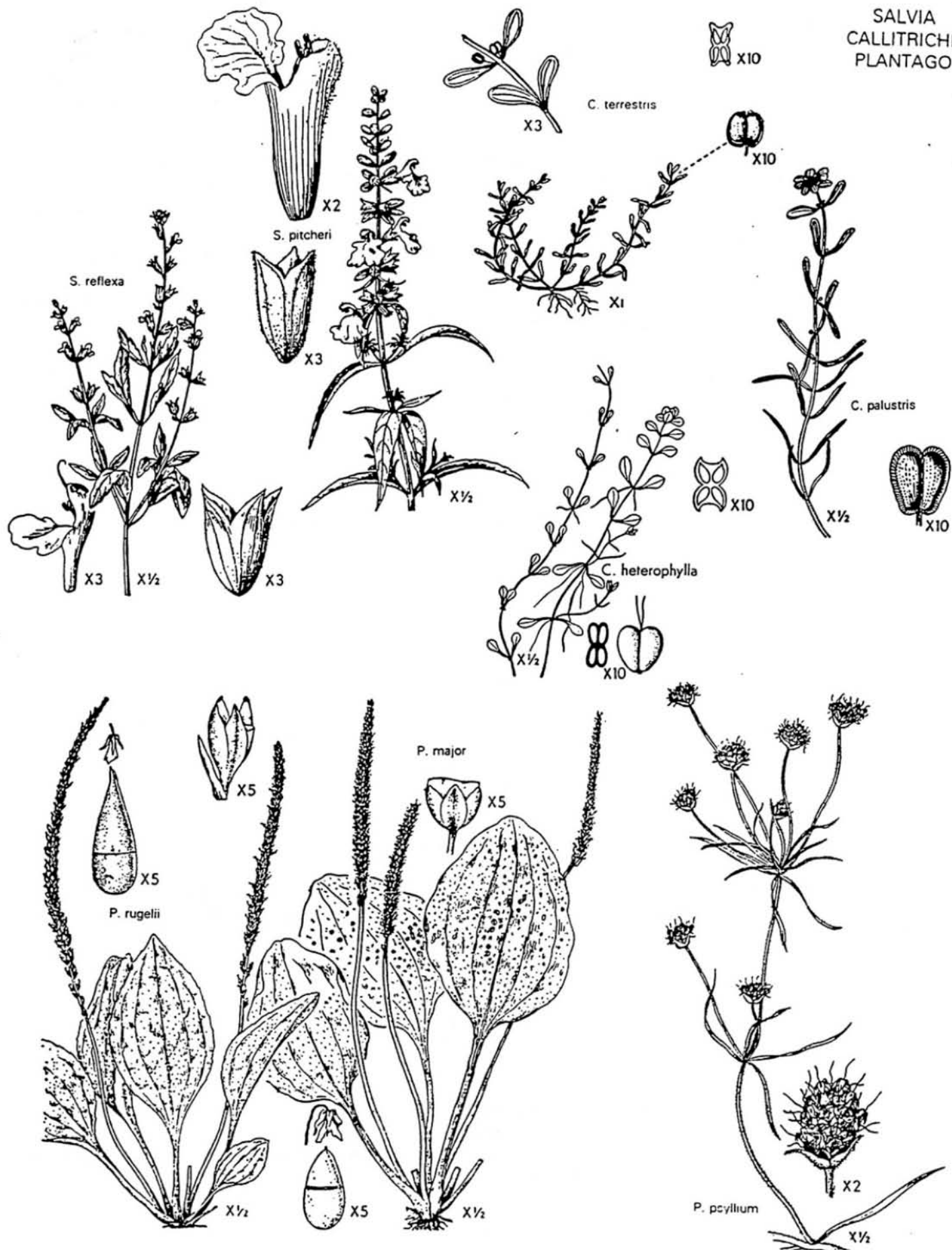
Stems minutely pubescent; leaves petiolate, 3-12 cm long, tapering; flowers in few-flowered verticils, forming a terminal spicate raceme; calyx bilabiate, densely pubescent throughout; corolla zygomorphic; stamens 2. Syn.: *S. azurea* Lam. var. *grandiflora* Benth.

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*