

sepals small or none; petals white or greenish; fruit ellipsoid or as wide as long, dorsally compressed, primary ribs prominent, lateral ribs broadly winged.

1. *Angelica atropurpurea* L.

Alexanders, Purplestem Angelica, Masterwort

Tall herb, stem to 3 m high and 3 cm thick, glabrous or nearly so above; flowers white, in compound umbels with evident pedicels; leaves decomposed, leaflets serrate; petioles of upper leaves forming a broad sheath, more than 1 cm wide when flattened, rounded or auricled at top; fruit and spherical umbel glabrous or nearly so. Syn.: *A. triquinata* Michx.

REFERENCES: Riddell 1834:116 (bottomland); Riddell 1835:8 (Worthington, bottomlands); Sullivant 1840:7; Selby & Craig 1890:10; Kellerman & Werner 1893:228 (on the island, first observed during the summer of 1891); Cooperrider 1995:235 (illus. p. 236).

HERBARIUM RECORDS: 1840—Cols., Sullivant; 20 Jun 1892—Cols., Bogue (CLM, OS); 7 Jul 1892—Cols., Bogue; 3 Jul 1911—Alum Creek, 2 mi. below Westerville, Hanawalt.

21. ERIGENIA Nutt. Harbinger of Spring

Plant glabrous; stem usually 1-2 dm tall; leaves ternately decomposed, ultimate segments linear or spatulate, basal except for the one subtending the inflorescence; bractlets spatulate, somewhat foliaceous; umbel usually 3-rayed, in the axil; pedicels short; sepals none; petals white, not incurved, obovate; fruit flattened laterally, wider than long, notched at top and base; ribs slender.

1. *Erigenia bulbosa* (Michx.) Nutt.

Harbinger of Spring, Pepper-and-salt

Stems arise from a globose tuber; flowers white in compound umbels; primary umbels with usually 3 rays; leaves ternately decomposed, ultimate segments linear or spatulate; umbellets subtended by oblong bractlets; anthers dark. REFERENCES: Riddell 1834:116 (open woods); Sullivant 1840:8; Craig 1890:82 (rather common in the woods, and sparingly along the river, 4 Mar 1882, 7 Apr 1883, 21 Apr 1884, 17 Apr 1885, 7 Mar 1886, 27 Mar 1887, 7 Apr 1888, 17 Mar 1889); Selby & Craig 1890:10; Cooperrider 1995:220 (illus. p. 223).

HERBARIUM RECORDS: 1840—Cols., Sullivant; 4 Mar & 13 Apr 1882—Olentangy R., OSU, Lazenby; 13 Apr 1882—OSU; 19 May 1883—Olentangy R., University Farm, Devo; 24 Mar 1889—beyond Sellsville, Selby; 27 Mar 1892—near Cols., E. M. Wilcox; 23 Apr 1892—Cols., Werner, [ca. 1925]—Westerville, moist lowlands, Camp; 4 Apr 1965—Flint Ravine, very common, rich woods, W of Rt. 23, N of Worthington, Sharon Twp., Cusick (KE); 1 Apr 1967—in rich black soil overlying broken limestone rock, approx. ½ mi. S of Dublin, E bank of Scioto R., Perry Twp., Stuckey 3348; 2 Apr 1967—E bank of Big Darby Creek, NW of cemetery at Georgesville, Pleasant Twp., Stuckey 3357; 7 Apr 1968—thin soil over limestone fragmented rock, E bank of Scioto R., approx. ¼ mi. S of Dublin, Stuckey 6358; 10 Apr 1970—½ mi. S of Dublin on E side of Scioto R., floodplain, Roberts 112; 11 Apr 1970—Flint Ravine near Camp Mary Orton, approx. 2 mi. N of Worthington along Rt. 23, Sharon Twp., Haynes 3257; 27 Mar 1971—along Scioto R. near limestone quarries, Roberts & D. Keil K6939; 10 Apr 1971—approx. ¾ mi. S of Dublin on E side of Scioto R., N of limestone quarry, floodplain, Perry Twp., Roberts 910; 15 Apr 1980—floodplain of Scioto R. ½ mi. S of Rt. 161, E bank N of abandoned limestone quarries, W. Carr 2620; 30 Apr 1980—Hayden Run ravine, bottom rocky soil, S of Hayden Run Rd., between Scioto R. & Dublin Rd., Norwich Twp., WC edge NW Cols. Quad., W. Carr 2656 (KE); 13 Apr 1982—Scenic Nature Preserve, Highbanks Metro Park (Franklin & Delaware Cos.), common, G. Moore 324; 10 Mar 1983—Blacklick Woods, Spring Hollow, Owens; 30 Mar 1986—Highbanks Metro Park (Delaware Co.), Olentangy R. floodplain, Witsberger 868 (OS, OWU); 21 Mar 1992—Rt. 33, ½ mi. S of Rt. 161, limestone outcropping along E bank of Scioto R., Perry Twp., Lowden 4890; 13 Apr 1992—Camp Mary Orton, N of Worthington, W of Rt. 23, woods near Olentangy R., Sharon Twp., Lowden 4900.

GENTIANACEAE, Gentian Family

Herbs; glabrous or nearly so; flowers perfect, hypogynous; petals usually 4 or 5, united; stamens as many, on the corolla; carpels 2, united; ovary 1-loculed, placentae 2, parietal; style 1; fruit a capsule.

a Stem-leaves opposite; petals without fringed glands.

b Corolla rotate, usually pink with green center, tube short. 1. SABATIA

b' Corolla tubular, funnellform, or campanulate, tube equaling to much longer than lobes or teeth.

c Corolla with erose, toothed, or fringed plaits between the lobes. 2. GENTIANA

c' Corolla without plaits between the lobes.

d Corolla 2-6 cm long, lobes fringed; flowers solitary. 3. GENTIANOPSIS

d' Corolla 1-2 cm long, lobes not fringed; flowers in dense cymes. 4. GENTIANELLA

a' Lower stem-leaves in whorls of 3-5; a fringed gland on each petal. 5. FRASERA

1. SABATIA Adans. Marsh-pink

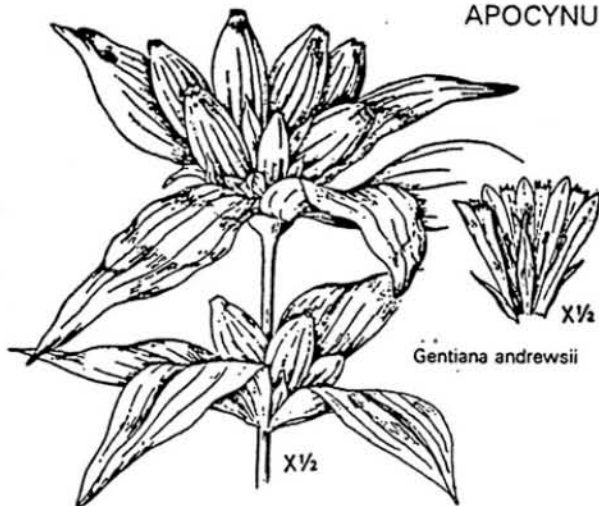
SABATIA
GENTIANA
GENTIANOPSIS
GENTIANELLA
FRASERA
VINCA
APOCYNUM



S. angularis



Gentiana quinquefolia



Gentiana andrewsii



F. caroliniensis



Gentiana procera



A. androsaemifolium

V. minor

Stem 4-angled, usually branched; stem-blades clasping; flowers in cymes; calyx lobes slender; corolla rotate, pink with green eye, 2-3 cm wide, tube short, lobes usually 5; style 2-cleft.

1. *Sabatia angularis* (L.) Pursh

Rose-pink, Common Marsh-pink, Centaury

Stems stout, 4-angled; leaves ovate or ovate-lanceolate, clasping; calyx lobes narrow, lanceolate; corolla pink with a greenish-yellowish central star.

REFERENCES: Selby 1891a:111a; Cooperrider 1995:295 (illus. p. 297).

HERBARIUM RECORDS: 1 Jul 1891—Georgesville, *Werner* (CLM); 21 Jul 1982—Blendon Woods, *Owens*; 9 Aug 1992—along RR tracks between Darby Creek Dr. & Big Darby Creek, E of Georgesville, Pleasant Twp., *Lowden 5017*; 3 Sep 1992—W side of Cabbage Rd., locally common in dry openings in brushy field, approx. ½ mi. S of Walnut St., Blendon Twp., New Albany Quad., *McCormac 4889*.

NOTE: Sullivant 1840:40 and Selby & Craig 1890:13 reported on plants collected in adjacent counties.

2. GENTIANA L. Gentian

Leaves sessile or nearly so, entire; flowers showy; calyx 4-5-lobed; corolla 4-5 lobed, with toothed or fimbriate plaits in the sinuses; anthers separate or cohering; style short; stigma 2-lobed.

1. *Gentiana andrewsii* Griseb.

Bottle Gentian, Closed Gentian

Herbs, stems glabrous; leaves opposite, lanceolate to ovate; corolla blue, closed at anthesis, plaits between lobes as long as or slightly longer than lobes, lobes adnate to plaits to the summit, truncate and denticulate across apex; calyx lobes lanceolate to elliptic.

REFERENCES: Riddell 1834:156 (*Gentiana saponaria*, wet prairies); Sullivant 1840:40 (*Gentiana saponaria* L.); Selby & Craig 1890:13 (*Gentiana saponaria* L.); Cooperrider 1995:300 (illus. p. 301).

HERBARIUM RECORDS: 1834—Duncan's Plains, *J. Paddock Collection* (ILL); 1840—Cols., *Sullivant*; 12 Oct 1901—S Cols., *Eckman*; 13 Oct 1901—swamp S Cols., *Bridwell, Jennings & Tyler*; 13 Oct 1901—swamp near canal, S of Steelton, *Tyler*; 9 Oct 1903—Cols., *Jennings*; 18 Sep 1982—Blendon Woods, 3 plants only in Big Meadow, *Owens*.

NOTE: The Sullivant specimen was labelled *Gentiana saponaria* L.

3. GENTIANOPSIS Ma. Gentian

Herb; leaves simple, opposite; flowers solitary; corolla 2-6 cm long, without plaits between the lobes, lobes fringed. (often incl. in *Gentiana*)

1. †*Gentianopsis procera* (Holm) Ma

Small Fringed Gentian

Leaves linear to lanceolate; corolla without plaits in sinuses between the lobes; corolla lobes coarsely dentate across apex, teeth of fringe along sides of corolla 2-4 times as long as those across apex; keels of calyx lobes strongly scabrous. Syn.: *Gentiana procera* Holm

REFERENCES: Riddell 1834:156 (*Gentiana crinita*, wet prairies); Sullivant 1840:39 (*Gentiana crinita* Froel.); Selby & Craig 1890:12 (*Gentiana crinita* Froel.); Cooperrider 1995:296 (illus. p. 297).

HERBARIUM RECORDS: 1840—Cols., *Sullivant*; 30 Aug 1892—near Cols., *E. M. Wilcox*; 17 Sep 1892—S of Cols., *E. M. Wilcox*; 4 Oct 1892—Cols., *Bogue*.

NOTE: The above specimens have all been labeled *Gentiana crinita*.

4. GENTIANELLA Moench Gentian

Herb; leaves simple, opposite; flowers in dense cymes; corolla 1-2 cm long, lobes not fringed. (often incl. in *Gentiana*)

1. †*Gentianella quinquefolia* (L.) Small

Stiff Gentian

Flowers in dense cymes; calyx and corolla 5-lobed; corolla without plaits in sinuses between the unfringed lobes. Syn.: *Gentiana quinquefolia* L.

REFERENCES: Riddell 1834:156 (*Gentiana quinqueflora*, wet prairies); Sullivant 1840:40 (*Gentiana quinqueflora* Willd.); Selby & Craig 1890:12 (*Gentiana quinqueflora*, #528 & 529); Cooperrider 1995:298 (illus. p. 301).

HERBARIUM RECORDS: Sep 1834—Duncan's Plains, *J. Paddock Collection* (ILL); 1840—Cols., *Sullivant*; 15 Nov 1890—Georgesville, *E. V. Wilcox*; 22 Nov 1890—Georgesville, *Selby*; 3 Oct 1891—Georgesville, *Selby*; 10 Oct 1891—Georgesville, *Werner* (CLM, OS); 24 Sep 1892—Georgesville, *Werner*; 24 Sep 1892—Franklin Co., *W. Kellerman*; 6 Oct 1898—Franklin Co., *J. H. Schaffner*.

5. FRASERA L. Columbo

Tall; basal leaves very large; lower stem-leaves whorled; flowers in a large terminal cluster of cymes; flower-parts in 4's; corolla 2-3 cm wide, greenish-yellow dotted with purple, each division with a large fringe-bordered gland below the middle; style elongate. (Often incl. in *Swertia* L.)

1. †*Frasera caroliniensis* Walter

American Columbo

Tall herb; leaves simple, lanceolate to oblanceolate, in whorls of 3-5; flowers in large cymose clusters; perianth parts in 4's; petals greenish-yellow dotted with purple, each with a large fringe-bordered gland below the middle. Syn.: *Swertia caroliniensis* (Walter) Kuntze

REFERENCES: Riddell 1834:156 (dry prairies); Sullivant 1840:39 (*Frasera walteri* Michx.); Selby & Craig 1890:12; Cooperrider 1995:302 (illus. p. 303).

HERBARIUM RECORDS: 1837—Cols., *J. Paddock Collection*, I. G. Jones (ILL); 1840—Cols., *Sullivant*; 22 Nov 1890—Big Darby, *Selby*; 6 Jun 1891—Morgan Station, *Selby* (OS, WOOS); 1 Jul 1891—Georgesville, *Werner* (CLM); 18 Jul 1920—Franklin Co., *J. H. Schaffner*; 24 Jun 1920—Big Darby Creek, *J. H. Schaffner*; 15 May 1921—near College Center, Blendon Twp., *J. H. Schaffner*; 12 Jun 1979—Darby Creek Metro Park, 0.3 mi. W of Alkire Rd. & Koebel-Suydam Rd., open woods above ravine, Pleasant Twp., Galloway Quad., *Cusick 19357* (KE).

APOCYNACEAE, Dogbane Family

Leaves simple, opposite; flowers hypogynous, perfect; sepals 5, united at base; corolla regular, petals 5, united; stamens 5, on the corolla; carpels 2, ovaries separate, styles and stigmas united; fruit an aggregate of 2 slender many-seeded follicles.

- a Stem trailing; flowers axillary, solitary; corolla blue. 1. VINCA
- a' Stem erect; flowers in cymes; corolla white or pink. 2. APOCYNUM

1. VINCA L. Periwinkle

Blades entire, glossy, evergreen; corolla salverform, 1.5-3 cm wide; stamens included in corolla-tube; a gland on each side of gynoecium, carpels thus appearing to be 4; seeds without hairs.

1. **Vinca minor* L.

Common Periwinkle, Myrtle

Cultivated and Naturalized (native of S Europe)

Plants trailing; leaves evergreen, opposite; flowers solitary in leaf axils, blue; calyx lobes not ciliate.

HERBARIUM RECORDS: 26 May 1922—Westerville, near graveyard, *George*; 12 May 1923—Westerville, along roadside, *L. Snyder*; 19 May 1985—OSU campus, near Drake Union, Cols., *Cho 19*; 5 Apr 1986—corner of W. Patterson Ave. & Williams Ct., disturbed habitat, Cols., *Cooperband 2*; 12 Apr 1986—Cayon Dr. near High St., Cols., *Taylor-Lehman 20*; 18 Apr 1986—12th Ave. & Indianola St., edge of yard, Cols., *Hollander 007*; 22 Apr 1986—W of Pomerine Hall, Neil Ave., OSU campus, Cols., *Di Sabato-Aust 27*; 15 May 1986—S side of 6887 Hayhurst, Worthington, *Benkowski 22*; 12 May 1988—Worthington, between 5921-5945 N. High St., 1 mi. S of Rt. 161 & Rt. 23 intersection, *M. Hoffman 64*; 15 Apr 1989—Rt. 33 & McCoy, abundant on hill, *Sutherland 21*; 8 May 1989—Overbrook Drive Ravine off N. High St., Clinton Twp., *Lowden 4010*.
NOTE: Not mapped for Franklin Co. by Cooperrider 1995:306 (illus. p. 307).

2. APOCYNUM L. Dogbane, Indian-hemp

Herbs with milky juice; flowers small; corolla campanulate, tubular, or urceolate, with 5 appendages within, stamens on base of tube; follicles 0.5-2 dm long; seeds with tuft of long silky hairs at apex.

Apocynum × *floribundum* Greene (†*A. medium* Greene), consisting of plants intermediate between *A. androsaemifolium* and *A. cannabinum* or *A. sibiricum*, apparently results from hybridization. Intermediate Dogbane, having calyx lobes about ½ as long as corolla tube and corolla white-pink (1889—Insane Asylum, near Cols., *Houston*), was reported by Cooperrider 1995:309.

- a Flowers bent downward; corolla white or pink-striped, 6-10 mm long, lobes spreading or recurved; calyx half length of corolla-tube or less; inflorescence usually overtopping sterile lateral branches below it. 1. *A. androsaemifolium*