

- a' Mature leaf-blades glabrous beneath or pubescent only in the axils, somewhat pubescent when young but not cobwebby; not glaucous.
- d Blades unlobed or with 2 shallow lateral lobes, sinus at each side of terminal lobe usually wide; fruit shining; diaphragm at nodes 2 mm wide or more. 3. *V. vulpina*
- d' Blades 3-7-lobed, sinus at each side of terminal lobe usually acute; fruit glaucous; diaphragm at nodes 2 mm wide or less. 4. *V. riparia*

1. *Vitis labrusca* L.

Fox Grape

Leaves densely pubescent beneath, forming a felt-like covering.

REFERENCES: Riddell 1834:119; Sullivant 1840:9; Selby & Craig 1890:9.

HERBARIUM RECORD: Oct 1902—Cols., cult., J. H. Schaffner.

NOTE: Not mapped for Franklin Co. by Braun 1961:265 or Cooperrider 1995:95 (illus. p. 96).

2. *Vitis aestivalis* Michx.

Summer Grape

Woody vine; branchlets terete; blades beneath with brown or cobwebby pubescence, not or little glaucous; leaves shallowly to deeply 3-5-lobed.

REFERENCES: Riddell 1834:119; Cooperrider 1995:95 (illus. p. 96).

HERBARIUM RECORD: 3 Oct 1892—Worthington, Selby.

3. *Vitis vulpina* L.

Frost Grape, Winter Grape

Leaves unlobed or with two short, shoulder-like lateral lobes. Thickets, woods, riverbanks. Syn.: *V. cordifolia* Michx.

REFERENCES: Riddell 1834:119; Sullivant 1840:9; Craig 1890:73 (in the woods and along the river S of the brook climbing on trees and shrubs, 26 May 1885, 18 May 1887, 29 May 1888); Selby & Craig 1890:9; Braun 1961:265 (illus. p. 262); Cooperrider 1995:97 (illus. p. 98).

HERBARIUM RECORDS: 1834—Worthington, J. Paddock Collection (ILL); 1840—Cols., Sullivant; 24 Sep 1892—Big Darby, Selby; 19 Jun 1893—Cols., Werner; 31 Aug 1896—Dublin, W. Kellerman; 24 Sep 1955—Overbrook Dr., Cols., E. Thomas; 30 Aug 1982—Scenic Nature Preserve, Highbanks Metro Park (Franklin & Delaware Cos.), riverbank, Brauning 349; 17 Jun 1986—Highbanks Metro Park (Delaware Co.), Kasko; 14 Jul 1987—Delawanda Park, E bank of Olentangy R. behind Graceland Shopping Center, Cols., T. Lammers & Lewis 6178; 8 Sep 1987—Highbanks Metro Park (Delaware Co.), B. Reed; 9 Jun 1988—Greenlawn Cemetery, W of deadend of Greenlawn Ave., SW Cols. Quad., Cusick 27479.

4. *Vitis riparia* Michx.

Riverbank Grape, Riverside Grape

Woody vine; leaves with two usually shallow, lateral lobes, each lobe acute or acuminate at apex; lobes pointing apically.

REFERENCES: Craig 1890:73 (*Vitis rotundifolia*, found on the island and along the river bank, 2 Jun 1884; see comments of Kellerman & Werner); Selby & Craig 1890:9; Kellerman & Werner 1893:225; Braun 1961:265 (illus. p. 264); Cooperrider 1995:97 (illus. p. 98).

HERBARIUM RECORDS: 1888—Cols., Craig; 20 Jul 1890—island in Scioto R. near Wyandotte Grove, Selby; 1 May 1891—Clos., Werner (CLM); 25 Jun 1892—Clos., Bogue; 14 Jul 1893—along Scioto R., Wyandotte, Selby (OS, WOOS); 22 May 1899—Big Darby, Selby; 24 Sep 1955—Northmoor Park, Clos., E. Thomas; 16 May 1980—RR tracks S of Goodale Ave. at end of Northwest Blvd., NE ¼ SW Clos. Quad., W. Carr 2755; [ca. 1982]—Blendon Woods, common, Owens; 12 May 1982—Neil Ave. under I-670 bridge, Clos., Paulson 36; 19 May 1985—Tuttle Park, Clos., Cho 45; 14 May 1986—Antrim Park along river, Yang 155; 18 May 1986—174 Clinton Heights, Clos., Di Sabato-Aust 40; 28 Apr 1988—Tuttle Park, numerous, NE of parking lot, Gerberick 20; 18 May 1988—2524 Neil Ave., hillside, very abundant, Chinery 50; 22 May 1988—E bank of Olentangy R. near Dodridge, abundant, Clos., Kelly 25; 6 Jun 1989—Turkey Run just S of Highland Dr. off Olentangy River Rd., Clinton Twp., Lowden 4116; 11 Aug 1989—Scioto R. along roadside, ½ mi. S of Henderson Rd. jct., Perry Twp., Lowden 4264; 23 Jun 1991—E bank of Scioto R., James J. Thomas Park, Upper Arlington, N of Fishinger Rd., Perry Twp., Lowden 4712.

LINACEAE, Flax Family

1. LINUM L. Flax

Herbs; leaves sessile, entire, narrow, alternate or opposite; flowers hypogynous, perfect, in clusters; corolla regular; sepals, petals, and stamens 5; petals separate; filaments connate at base; carpels 5, united; styles 5 or united at base; capsule partly or completely 10-loculed, a false septum in each carpel; fruit a capsule; seeds 10.

a Petals blue, 1 cm long or more. 1. *L. usitatissimum*

a' Petals yellow, usually less than 1 cm long.

b Two dark glands at base of leaf; 3 lines decurrent from leaf-base to beyond next node below; all sepals glandular-ciliate. 2. *L. sulcatum*

LINUM
POLYGALA
STAPHYLEA
KOELREUTERIA



- b' No glands at base of leaf; outer sepals not glandular; 1 prominent line decurrent from center of leaf-base, often becoming faint before next node below; capsule depressed at summit. 3. *L. virginianum*

1. **Linum usitatissimum* L.

Common Flax

Adventive (European cultigen)

Annual; leaves alternate and 3-nerved; inner sepals ciliate; petals blue or white; stigmas linear.

REFERENCES: Riddell 1834:120 (naturalized); Craig 1890:71 (cultivated in a field near the island last summer and some of it came up this year; escaped from cultivation but is probably not permanently established; specimens were found this spring growing in moist soil along the river bank and in the fields lying adjacent to the one where it was grown last year); Selby & Craig 1890:8 (introduced); Cooperrider 1995:5 (illus. p. 10).

HERBARIUM RECORDS: 9 Jul 1892—Alum Creek Station, *Bogue*; 13 Oct 1904—Cols., *W. Kellerman*.

2. *†Linum sulcatum* Riddell

Grooved Yellow Flax

Sepals glandular-ciliate; petals yellow; leaf bases with two dark stipular glands along stem.

REFERENCES: Selby & Craig 1890:8; Cooperrider 1995:5 (illus. p. 6).

HERBARIUM RECORDS: 22 Nov 1890—Big Darby, *Selby*; 24 Sep 1892—Georgesville, *Selby*; 24 Sep 1892—Franklin Co., *Werner*.

3. *Linum virginianum* L.

Slender Yellow Flax

Inflorescence loosely corymbiform, more or less dichotomously branched, branches spreading; outer sepals not glandular; petals yellow; no glands at base of leaf; most leaf blades subulate-tipped. Syn.: *L. virginianum* var. *texanum* Planch.

REFERENCES: Riddell 1834:120 (rocky situations); Selby & Craig 1890:8; Cooperrider 1995:7 (illus. p. 6).

HERBARIUM RECORDS: Aug 1890 & Jul 1891—Cent. Coll. [Central College], *Selby*; 8 Jul 1891—Big Walnut, Cols., *Selby* (WOOS); 7 Aug 1899—Big Walnut, Cols., *Selby*; Sep 1992—W side of Cubbage Rd., rare in dry openings in brushy field, approx. ½ mi. S of Walnut St., Blendon Twp., New Albany Quad., *McCormac* 4899.

POLYGALACEAE, Milkwort Family

1. POLYGALA L. Milkwort

Herbs; leaves simple; flowers hypogynous, zygomorphic, bisporangiate, in spikes, racemes, or heads; sepals 5, the 3 of the outer circle (the uppermost and the 2 lower) small, the two inner or lateral ones (wings) larger and petaloid; petals 3, united, the lower one concave and often bearing a fringed crest; stamens 6 or 8, filaments united below in a sheath split on upper side and more or less united with petals; anthers 1-loculed, opening by a pore at or near the tip; carpels 2, united; style 1; ovary 2-loculed; capsule 2-seeded.

a Leaves, at least the lower, whorled or opposite. 2. *P. verticillata* var. *verticillata*

a' Leaves all alternate.

b Racemes spherical or short-cylindric, dense and headlike, 1-2 cm long, often 1 cm thick or more; stems solitary; annual. 3. *P. sanguinea*

b' Racemes dense, slender-cylindric; stems tufted, perennial; aril somewhat shorter than seed. 1. *P. senega*

1. *Polygala senega* L.

Seneca Snakeroot

Perennial herbs with woody rhizomes; leaves alternate, acuminate, lowest scalelike; racemes slender-cylindric, dense; flowers white-green; pedicels 1 mm long or less; cleistogamous flowers absent.

REFERENCES: Riddell 1834:119; Sullivant 1840:13; Selby & Craig 1890:9; Selby 1891a:111a (#162 re-collected); Cooperrider 1995:29 (illus. p. 28).

HERBARIUM RECORDS: 1837—Cols., *J. Paddock Collection* (ILL); 1840—Cols., *Sullivant*; 4 Jun 1883—Cols., Coll.?; 9 May 1891—Big Darby, *Selby*; 1 Jul 1891—Big Darby, *Selby*; 1 Jul 1891—Georgesville, *Werner* (CLM); 7 May 1892—Georgesville, *Detmers*; 22 May 1899—Big Darby, Cols., *Selby*; 8 Jun 1901—Big Darby, *Mead*; 11 May 1986—Morse Rd. woodland next to the School for the Blind, *Yang* 134; 14 May 1992—Cedar Ridge, Battelle Darby Metro Park, Pleasant Twp., *Lowden* 4936; 31 May 1993—jct. of Graessle Rd. & Rt. 665, bluffs, Battelle Darby Metro Park, Pleasant Twp., *Lowden* 5057.

2. *†Polygala verticillata* L. var. *verticillata*

Whorled Milkwort

Herbs; leaves mostly whorled; racemes slender, cylindric-conic; flowers greenish-white to pink-tinged, tightly packed throughout inflorescence; wings obovate, rounded at tip, less than 3 mm long, shorter than capsule.

REFERENCES: Riddell 1834:119 (*Polygala ambigua*); Cooperrider 1995:31 (illus. p. 28).