

2. RHAMNUS L. Buckthorn

Shrubs or small trees; leaves alternate or rarely opposite; flowers small, greenish, perigynous, solitary or in small axillary clusters, bisporangiate or monosporangiate, then each kind often with vestiges of the other type of sporophyll; sepals and stamens 4 or 5; petals 4 or 5 or none; carpels and locules 2-4; fruit a drupe with 2-4 stones.

- a Leaves alternate, with more than 3 pairs of lateral veins; winter twigs not ending in thorns; flowers monosporangiate or some of them bisporangiate, appearing with the leaves; petals 4 or none; winter buds with scales.
- b Leaf-blades crenate-serrate, obovate-elliptic; petals none; sepals and stamens 5. 1. *R. alnifolia*
- b' Leaf-blades finely serrulate, lanceolate-elliptic; sepals, stamens, and petals 4. 2. *R. lanceolata*
- a' Leaves often opposite or nearly so, with usually 3 pairs of lateral veins; winter twigs usually ending in thorns; flowers monosporangiate, appearing with the leaves; petals and sepals 4. 3. *R. cathartica*

1. †*Rhamnus alnifolia* L'Hér.

Alder-leaved Buckthorn

Leaf blades crenate-serrate, with mostly 5 prominent veins on either side of midrib.

HERBARIUM RECORD: 1840—Cols., *Sullivant*.

NOTE: *Sullivant* 1840:14 and *Selby & Craig* 1890:8 reported on plants collected in adjacent counties. Not mapped for Franklin Co. by *Cooperrider* 1995:87 (illus. p. 85).

2. †*Rhamnus lanceolata* Pursh

Lance-leaved Buckthorn

Shrub; leaves alternate, margins finely serrulate; blades with mostly 7 prominent lateral veins on either side of midrib; drupes with 2 pits.

REFERENCES: *Sullivant* 1840:14; *Selby & Craig* 1890:8; *Braun* 1961:258 (illus. p. 256); *Cooperrider* 1995:87 (illus. p. 88).

HERBARIUM RECORDS: 1833—*Worthington, J. Paddock Collection* (ILL); 1840—Cols., *Sullivant*; 14 Jul 1893—Scioto R., *Selby*; 11 Aug 1895—Cols., *W. Kellerman*; 19 Oct 1901—Scioto R., limestone banks, *J. H. Schaffner*; 30 Jun 1906—Big Darby, *W. Kellerman*; 15 Jul 1933—Scioto R. above Dublin, *Hicks*.

3. **Rhamnus cathartica* L.

European Buckthorn

Naturalized (native of Eurasia)

Shrub or small tree; leaves opposite or nearly so; blades with usually 3 pairs of lateral veins; winter twigs usually ending in thorns; flowers monosporangiate, petals and sepals 4; drupes with usually 4 pits.

REFERENCE: *Cooperrider* 1995:87 (illus. p. 85).

HERBARIUM RECORDS: 19 May 1980—ditch between two RR rights-of-way 4 blks. E of N. 4th St. just S of E. 11th Ave., NW ¼ SE Cols. Quad., *W. Carr* 2771 & 2772 (KE, OS); 10 May 1986—OSU campus, W of Pomerine Hall, Neil Ave., Cols., *Di Sabato-Aust* 36; 23 Jun 1991—E bank of Scioto R., James J. Thomas Park N of Fishinger Rd., Upper Arlington, Perry Twp., *Lowden* 4715.

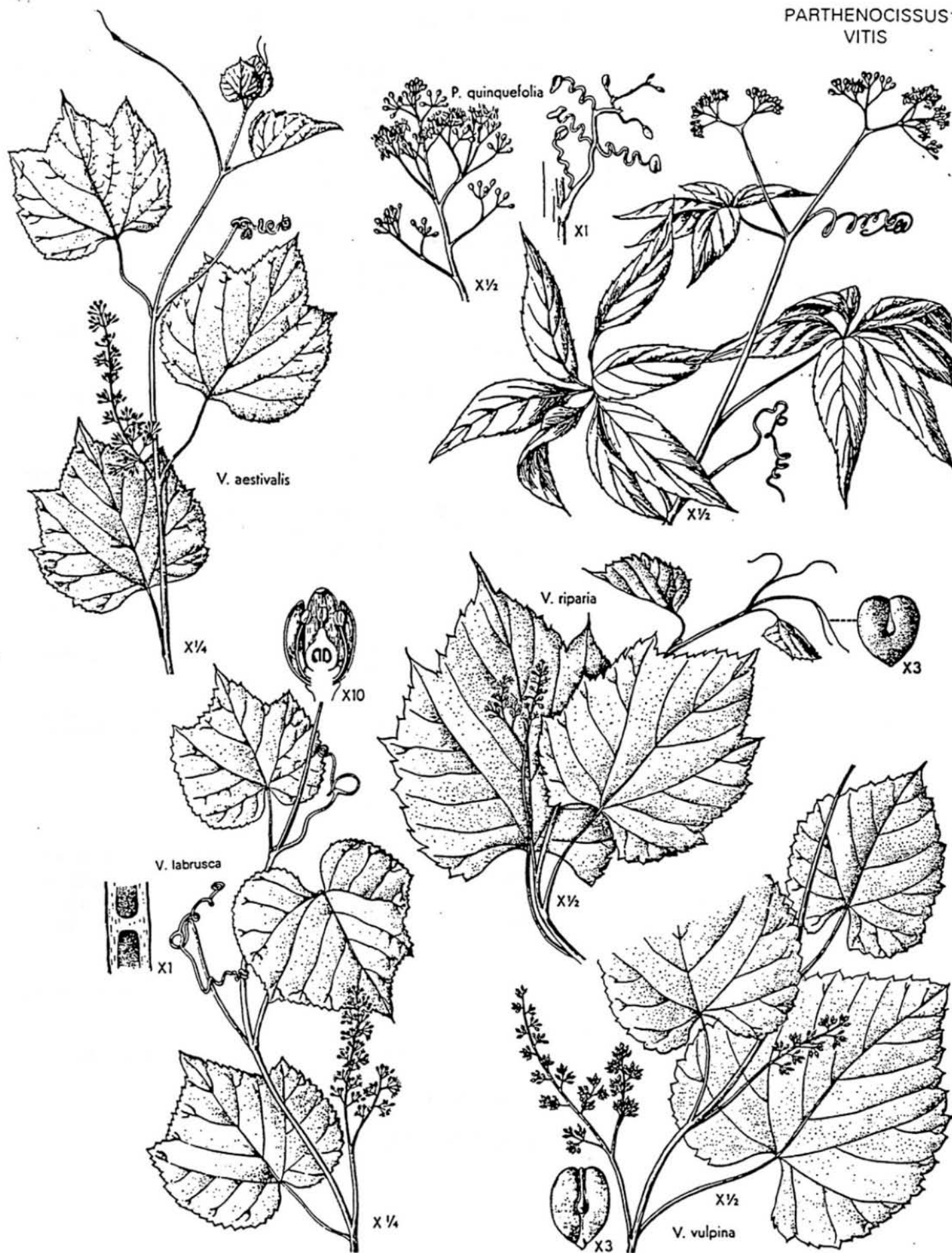
VITACEAE, Grape Family

Climbing or trailing woody vines; leaves alternate, simple or compound, with or without stipules; flowers small, hypogynous, bisporangiate or monosporangiate; clusters usually opposite leaves; perianth regular; sepals, petals, and stamens 5 or sometimes 4; calyx minute; petals separate but sometimes connate at tip, greenish; stamens opposite petals; carpels usually 2, rarely more, united, locules as many; style short or absent; placentation central; ovules 1-2 per carpel; fruit a berry.

- a Hypogynous disk not evident; leaves, or some of them, palmately compound, leaflets 3-7, if 3, then tendrils ending in adhesive disks. 2. **PARTHENOCISSUS**
- a' Ovary surrounded by hypogynous disk; leaves simple or twice compound.
- b Petals not expanding, falling with tips united as a cap; glands of hypogynous disk alternate with stamens. 3. **VITIS**
- b' Petals expanding, not united; hypogynous disk cup-shaped. 1. **AMPELOPSIS**

1. AMPELOPSIS Michx.

PARTHENOCISSUS
VITIS



With or without tendrils; leaves simple, margins dentate or lobed, or leaves compound with dentate leaflets; flowers monosporangiate, each kind with rudimentary structures of the other kind, or some flowers bisporangiate; calyx somewhat lobed; petals separate; berry rather dry.

1. *Ampelopsis brevipedunculata* (Maxim.) Trautv.

Porcelain-berry

Adventive (native of NE Asia)

Vine, tendril-bearing, climbing; leaves simple, moderately to deeply 3-5-lobed, variable; fruit-clusters wider than long.

HERBARIUM RECORD: 11 Oct 1991—Delawanda Park, woody area at S end of ballpark behind Graceland Shopping Center, Lowden 4873.

NOTE: Not mapped for Franklin Co. by Cooperrider 1995:91 (illus. p. 92).

2. *PARTHENOCISSUS* Planch. Virginia Creeper, Woodbine

Vines with tendrils; leaves palmately compound or simple and lobed; berry 1-4 seeded.

The high-climbing Boston Ivy (native of China and Japan) is included in the key below.

- a Leaves 3-foliolate or simple and lobed; tendrils ending in adhesive discs.

P. tricuspidata (Siebold & Zucc.) Planch., Boston Ivy

- a' Leaves palmately compound, leaflets usually 5; tendrils ending in adhesive discs; inflorescence elongate, paniculate.

1. *P. quinquefolia*

1. *Parthenocissus quinquefolia* (L.) Planch.

Virginia Creeper

Vine, often climbing; tendrils ending in adhesive discs; leaves palmately compound; leaflets 5; inflorescence elongate, paniculate. Woods & thickets. Syn.: *Ampelopsis quinquefolia* Michx.

REFERENCES: Riddell 1834:119; Sullivan 1840:9; Craig 1890:73 (common along the brook and around the island; there are two distinct forms growing on the campus; one var. has short branching tendrils and each subdivision ends in sucker-like disk by which it can climb walls: it is the form growing on the N side of the botanical bldg.; the other var. has long unbranched tendrils without disks, and climbs trees, trellises, etc.; it grows at the E end of the college bldg.; these forms were first described by Prof. W. R. Lazenby in the Experiment Station Report for 1886; 15 Jul 1882); Selby & Craig 1890:9; Braun 1961:261 (illus. p. 260); Cooperrider 1995:93 (illus. p. 92).

HERBARIUM RECORDS: Jul 1888—Cols., Craig; Sep 1901—Cols., J. H. Schaffner; 15 Jun 1925—Flint, R. Crane (OWU); 8 Sep 1982—Scenic Nature Preserve, Highbanks Metro Park (Franklin and Delaware Cos.), G. Moore 348; 24 Jul 1986—Highbanks Metro Park (Delaware Co.), Kasko; 23 Jun 1991—E bank of Scioto R., N of Fishing bridge, James J. Thomas Park, Perry Twp., Lowden 4730.

3. *VITIS* L. Grape

With coiling tendrils; blades palmately veined, round-ovate, cordate, lobed or only coarsely toothed; flowers fragrant, the staminate with rudiments of carpels, the carpellate with rudiments of stamens; calyx none or a narrow flange; petals coherent at summit, deciduous as a cap; each carpel 2-ovuled; berry juicy.

Vitis cinerea Engelm. (Pigeon Grape) was reported for Franklin Co. by McCance 1984:A-254. I have seen no specimen from Franklin Co. Not mapped for Franklin Co. by Braun 1961:266 (illus. pp. 262 & 264) or Cooperrider 1995:97 (illus. p. 98).

- a Mature leaf-blades pubescent beneath with cobwebby or ordinary hairs or, if nearly glabrous, then glaucous; young blades pubescent beneath with cobwebby hairs, these hairs sometimes brown, and sometimes also with ordinary hairs.

- b An inflorescence or a tendril (or both) opposite each of 3 or more successive leaves; fruits 1 cm in diameter or more; pubescence woolly, brown or gray. 1. *V. labrusca*

- b' An inflorescence or a tendril (or both) opposite no more than 2 successive leaves; fruits less than 1 cm in diameter.

- c Branchlets angled, thin cobwebby pubescent; leaves unlobed or shallowly lobed, not glaucous beneath. *V. cinerea* var. *baileyana* (Munson) Comeaux

- c' Branchlets terete; blades usually 3-5-lobed, sometimes glaucous beneath. 2. *V. aestivalis*

- 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; Sullivan 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; Sullivan 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., Sullivan; 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—Cols., Werner (CLM); 25 Jun 1892—Cols., Bogue; 14 Jul 1893—along Scioto R., Wyandotte, Selby (OS, WOOS); 22 May 1899—Big Darby, Selby; 24 Sep 1955—Northmoor Park, Cols., E. Thomas; 16 May 1980—RR tracks S of Goodale Ave. at end of Northwest Blvd., NE ¼ SW Cols. Quad., W. Carr 2755; [ca. 1982]—Blendon Woods, common, Owens; 12 May 1982—Neil Ave. under I-670 bridge, Cols., Paulson 36; 19 May 1985—Tuttle Park, Cols., Cho 45; 14 May 1986—Antrim Park along river, Yang 155; 18 May 1986—174 Clinton Heights, Cols., 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, Cols., 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*