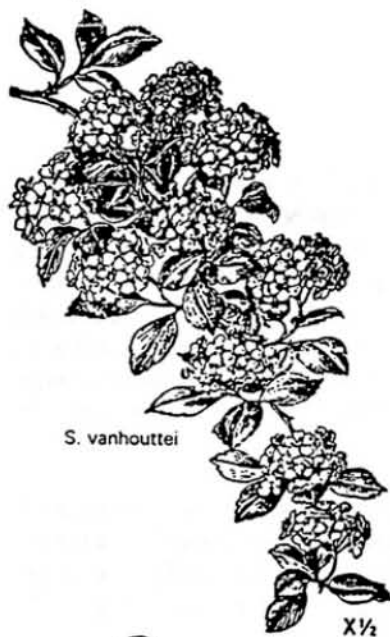
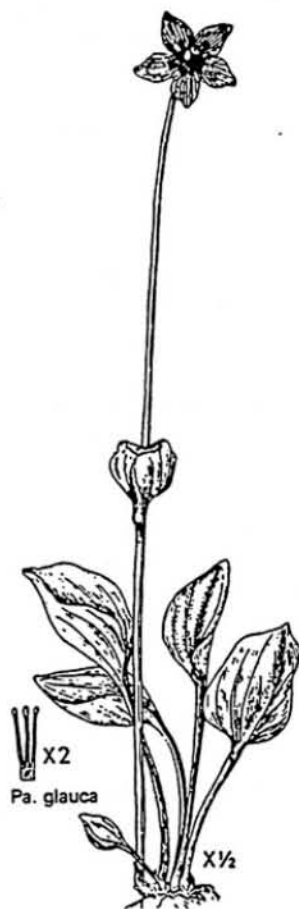
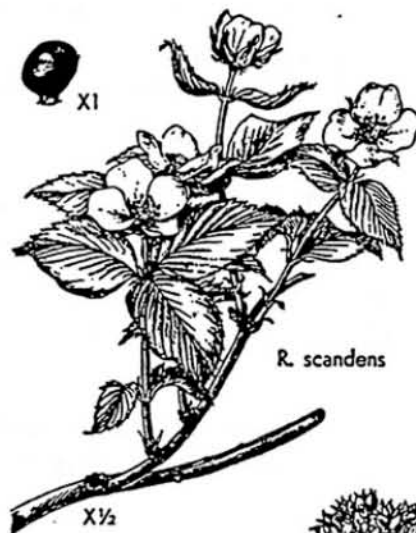
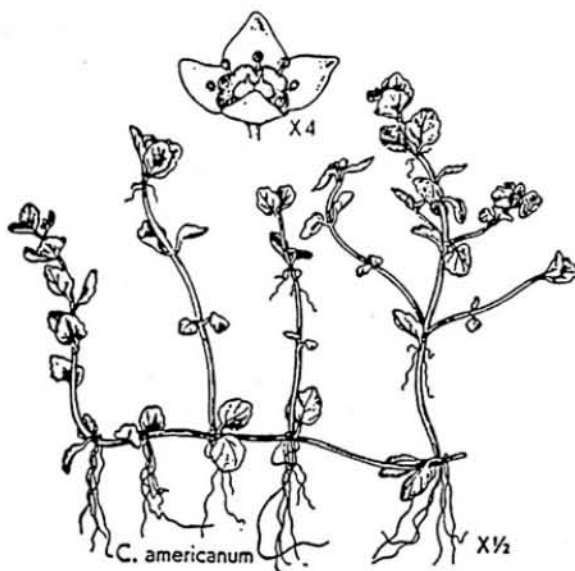
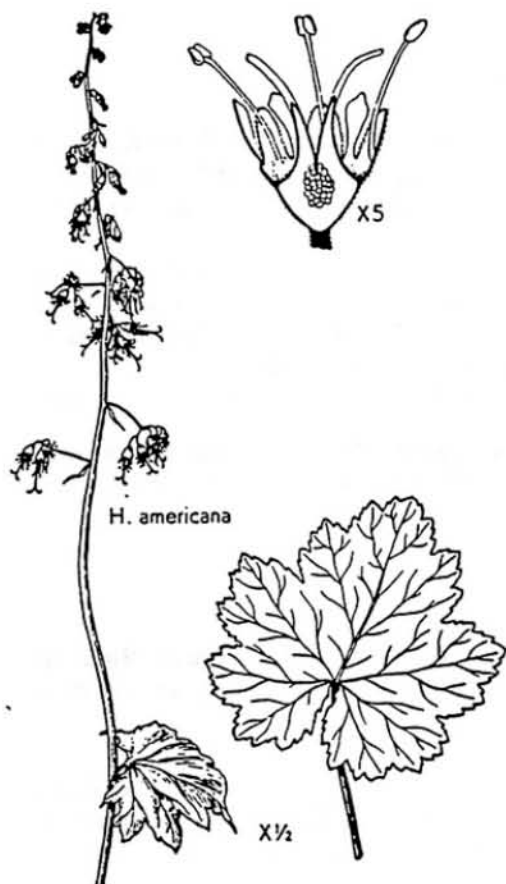


HEUCHERA  
PARNASSIA  
CHRYSOSPLENIUM  
RHODOTYPOS  
PHYSOCARPUS  
SPIRAEA



1. *Heuchera americana* L.

Common Alum-root, Blunt Lobed Liver-leaf

Erect, tall; leaves mostly basal, long-petioled, glandular-puberulent; blades round-ovate, toothed or lobed, palmately veined, bases cordate; flowers in panicles; hypanthium minutely glandular-pubescent on outer surface; petals as long or longer than sepals; carpels 2, united below, free upper portions forming 2 beaks on capsule.

REFERENCES: Riddell 1834:117 (slaty ravines); Riddell 1835:9 (Worthington, dense & shady woods); Sullivant 1840:20; Selby & Craig 1890:9. HERBARIUM RECORDS: 1840—Cols., Sullivant; Jun 1891—Cols., Werner (CLM); 27 May 1896—Clintonville, M. Wright; 24 May 1899—Scioto R., Fullmer; 28 May 1900—OSU Botanic Garden, Lamb; 18 May 1982—Highbanks Metro Park (Franklin & Delaware Cos.), blufftop, uncommon, G. Moore 298; 22 Jul 1992—the Quarry, off Rt. 33, E side of Scioto R., approx. ½ mi. S of Rt. 161, W of entrance to Riverside Green, on limestone rocks, Perry Twp., Lowden 4994.

6. PARNASSIA L. Grass-of-Parnassus

Glabrous herb; cauline leaf 1, sessile, basal leaves long-petioled; blades entire, coriaceous, round-ovate; flowers solitary; perianth regular, strongly veined; sepals 5; petals 5, white; staminodes 5, opposite petals, each apparently 3 sterile stamens united at base; stamens 5; carpels united, ovary superior, 1-loculed; placentae 4, parietal; stigmas 4.

1. †*Parnassia glauca* Raf.

American Grass-of-Parnassus

Herb, glabrous; basal leaves long-petioled, peduncle bearing 1 leaf, sessile; blades entire, coriaceous, round-ovate; flowers solitary; perianth regular, strongly veined; sepals 5, petals 5, white; stamens 5; staminodes approx. 15, bases united in groups of apparently 3 each; carpels united; stigmas 4. Syn.: *P. caroliniana*, misapplied

REFERENCES: Riddell 1834:117 (*Parnassia americana*, wet prairies); Sullivant 1840:20; Selby & Craig 1890:10; Selby 1892a:111 (#249 Re-collections, by canal, S of city, Wilcox).

HERBARIUM RECORDS: 1834—Cols., J. Paddock Collection (ILL); 1840—Cols., Sullivant; 17 Sep 1892—Cols., on the canal S of city, E. M. Wilcox; 17 Sep 1892—Cols., Bogue; 4 Oct 1892—Cols., Bogue; 12 Sep 1985—N facing slope S side Big Darby Creek, calcareous wet seep, 0.4 mi. downstream of Rt. 665, Pleasant Twp., Knoop (KE).

7. CHRYSOSPLENIUM L. Golden Saxifrage

Decumbent herb; leaves small, short-petioled, upper alternate, lower opposite, round-ovate, entire or obscurely toothed; flowers small, solitary, nearly sessile, green, yellow, or red; sepals 4-5; petals none; stamens usually 8, in notches of disk; styles 2; ovary flat, 1-loculed; placentae 2, parietal.

1. *Chrysosplenium americanum* Schwein.

Golden Saxifrage

Decumbent plants of wet soil, small; leaves opposite below, upper alternate, short-petioled; blades round-ovate, entire or obscurely toothed; flowers small, solitary, nearly sessile, green; sepals 4-5; petals none; stamens 8, in notches of disk; styles 2.

HERBARIUM RECORD: 14 Jul 1893—Scioto R., Selby.

ROSACEAE, Rose Family

Trees, shrubs, and herbs, sometimes climbing; leaves alternate (rarely opposite), simple or compound, stipules or stipule-scars usually present; rarely dioecious; flowers perigynous or epigynous (rarely merely hypogynous), bisporangiate or rarely monosporangiate; perianth usually regular; sepals usually 5 (3-8), sometimes subtended by a circle of bracts; petals usually 5, separate, rarely none; stamens 5-many, separate; carpels 1 or few to many, separate or united; when solitary, the carpel is free from the hypogynous hypanthium and fruit is a drupe or rarely an achene; when 2 to many, separate, carpels are free from the hypogynous hypanthium and fruit is an aggregate of achenes, follicles, or drupelets; when 2-5 carpels are united, the flower is epigynous (hypanthium is adnate to the ovary), styles or style-branches, stigmas, and locules are as many as carpels (except when, rarely, locules become twice as many by growth of a false septum in each carpel), placentae are axile, and fruit is a pome.

*Cotoneaster* Medik., *Kerria* DC. and *Rhodotypos* Siebold & Zucc. are genera of ornamental shrubs that occasionally escape from cultivation. Fire-thorn, *Cotoneaster pyracantha* (L.) Spach (Syn.: *Pyracantha coccinea* Roem.), is a thorny evergreen, with blades oblanceolate, crenate-serrate, flowers small in dense corymbs, petals white and pome bright red or orange (27 Aug 1897—near Hilliard, W. Kellerman; 14 Jun 1989—OSU Campus, N side of B&Z bldg., 1735

Neil Ave., Cols., *Lowden 4185*). Other cultivated species found on the OSU campus: *Cotoneaster horizontalis* Decne. and *Cotoneaster lucida* Schtdl. *Kerria japonica* (L.) DC. has simple leaves and bright yellow flowers (21 Apr 1988—OSU campus, Neil Ave., N of Pomerene Hall, cult., several plants on steep shaded bank, *M. Hoffman 28*). The Asiatic Jetbead, *Rhodotypos scandens* (Thunb.) Makino, has leaves opposite, simple, ovate to oblong-ovate, acuminate, doubly sharp-serrate, short-petioled; flowers white; sepals 4, persistent in fruit, jagged; petals 4, white, ovary superior; drupelet nearly black, shiny, 1-seeded (5 May 1980—levee along W bank of Olentangy R., ½ km N of Dodridge St., damp weedy woods, SE corner NW Cols. Quad., *W. Carr 2692*; [ca. 1982]—Blendon Woods, escaped from cultivation, *Owens*; 8 Apr 1986—near intersection of McBane Rd. and Weymeyer Rd., cultivar on a home lawn, Cols., *Taylor-Lehman 2*; 12 Apr 1986—OSU campus, cultivar, growing on the margin of the parking lot for the Cancer Research center on 12th Ave. near Cannon Dr., Cols., *Taylor-Lehman 13*; 25 May 1986—ravine at intersection of Riverview Park Dr. and Rustic Bridge Dr., uncommon, *R. Burnes 39*; 1 May 1987—W bank of the Olentangy R., N of Dodridge St. bridge and E of Union Cemetery (S unit), mesic forest on floodplain, only one plant seen, evidently spontaneous here, Cols., *T. Lammers 6090*; 8 May 1989—Overbrook Drive Ravine, between N. High St. & E. Cooke Rd., escape in woods, Clinton Twp., *Lowden 4030*).

- a Flowers perigynous (or rarely almost hypogynous); hypanthium sometimes completely enclosing carpels but not adnate to them; carpels few to many, rarely only 1, separate or slightly united at base.
- b Trees and shrubs.
  - c Carpel 1; fruit a drupe; blades simple, serrate; often glands present on petiole; flowers sometimes appearing before leaves. **16. PRUNUS**
  - c' Carpels more than 1.
    - d Carpels more than 10; if rarely fewer, then flowers 2 cm wide or more.
      - e Leaves pinnately compound with 5-7 entire leaflets; stipules dry, sheathing; petals yellow. **8. POTENTILLA**
      - e' Leaves compound with serrate leaflets, or simple and palmately lobed; plants usually prickly or bristly.
        - f Hypanthium globose or urn-shaped, narrowed at mouth, becoming fleshy around bony achenes in fruit; flowers large and showy, of various colors. **15. ROSA**
        - f' Hypanthium shallow, not narrowed at mouth, not becoming fleshy; fruit an aggregate of drupelets; petals white to rose-color. **11. RUBUS**
    - d' Carpels 10 or fewer; flowers small, white or pink.
      - g Leaves shallowly lobed, present at anthesis; carpels sometimes somewhat united at base, at maturity 7-10 mm long; seeds 1.5-2 mm long, obovoid. **1. PHYSOCARPUS**
      - g' Leaves entire or toothed, sometimes appearing after the flowers; carpels separate; follicles and seeds much smaller than above. **2. SPIRAEA**
- b' Herbs.
  - h Low scapose herbs with simple or 3-foliolate basal leaves.
    - i Carpels more than 10; flowers subtended by sepaloïd bracts; basal blades 3-foliolate.
      - j Petals white; bracts about equaling sepals. **5. FRAGARIA**
      - j' Petals yellow; bracts 3-lobed or -toothed, broader than sepals. **6. DUCHESNEA**
    - i' Carpels 10 or fewer; bracts present or absent.
      - k Petals white; leaves simple, blades round-ovate, crenate, cordate at base; flowers usually solitary. **12. DALIBARDA**
      - k' Petals yellow; leaves 3-foliolate, leaflets irregularly lobed or toothed; flowers in clusters of a few. **7. WALDSTEINIA**
  - h' Not scapose.
    - l Flowers scarcely perigynous; leaves pinnately compound, terminal leaflet large and palmately lobed; petals white to pink; inflorescence a panicle; carpels 5-15. **9. FILIPENDULA**
    - l' Without the above set of characters.
      - m Carpels more than 10, becoming achenes.
        - n Styles persistent in fruit, jointed near tip, becoming hooked. **10. GEUM**
        - n' Styles deciduous, not jointed, not becoming hooked. **8. POTENTILLA**
      - m' Carpels 10 or fewer.
        - o Leaves, except sometimes lowest, 3-foliolate or 3-parted; petals 1-2 cm long, white or pink; carpels 5. **4. PORTERANTHUS**

- o' Leaves pinnately compound or decomposed; petals much less than 1 cm long.
- p Leaves decomposed; dioecious; petals white; flowers in spikelike racemes aggregated in panicles; carpels about 3. **3. ARUNCUS**
- p' Leaves compound; carpels 1 or 2, ovaries concealed within hypanthium.
  - q Petals yellow; flowers in narrow racemes; hypanthium, in fruit, with band of hooked prickles. **13. AGRIMONIA**
  - q' Petals absent, sepals 4, petaloid; flowers in heads or dense spikes; hypanthium without prickles. **14. SANGUISORBA**
- a' Flowers epigynous; carpels united.
- r Ovules many in each locule of ovary; blades tapering at base; stipules conspicuous. **17. CHAENOMELES**
- r' Ovules usually 1-2 in each locule of ovary.
  - s Usually with typical lateral thorns; ripe carpels bony.
    - t Deciduous; 1 or 2 ovules in each locule, if 2, then 1 sessile and 1 stalked and sterile; blades various. **21. CRATAEGUS**
    - t' Evergreen; 2 like ovules in each locule; blades oblanceolate. **COTONEASTER** Medik.
  - s' Without typical lateral thorns, but some branches may end in thorns; ripe carpels papery or leathery.
    - u Flowers in racemes; pome small, 1 cm in diameter or less; leaves simple; no glands on upper side of midvein. **22. AMELANCHIER**
    - u' Flowers in simple or compound corymbs; pomes large, sometimes with grit cells, or if 1 cm in diameter or less, then leaves either with a row of toothlike glands on upper side of midvein or pinnately compound.
      - v Leaves pinnately compound; styles separate; flowers about 1 cm wide, in dense compound clusters; fruit about 1 cm wide. **20. SORBUS**
      - v' Leaves simple; flowers in umbels, corymbs, or racemes.
        - w A row of slender toothlike glands on upper side of midvein of leaf; fruit purple or black, 1 cm or less wide; without thorns. **19. ARONIA**
        - w' Glands of midvein of leaf sometimes absent; flowers 2 cm wide or more; branches sometimes ending in thorns; fruit large. **18. PYRUS**

### 1. **PHYSOCARPUS** Maxim. Ninebark

Shrub; older bark peeling in thin layers; leaves simple, blades shallowly palmately 3-lobed; flowers 1 cm wide or less, in rounded corymbs; sepals 5; petals 5, white; stamens many; carpels 2-5, separate or united at base, becoming few-seeded follicles.

#### 1. *Physocarpus opulifolius* (L.) Maxim.

Ninebark

Shrub, older bark peeling in thin strips; leaves at anthesis, simple, blades shallowly palmately 3-lobed; flowers in rounded corymbs, hypanthium a shallow cup; sepals 5; petals 5, white; stamens many; carpels 2-5, separate or weakly united at base; follicles few-seeded.

REFERENCES: Riddell 1834:118 (*Spiraea opulifolia*, rocky situations); Riddell 1835:21 (*Spiraea opulifolia*, Worthington, slaty ravines); Sullivant 1840:17 (*Spiraea opulifolia* var. *tomentilla* DeCand.); Selby & Craig 1890:9; Braun 1961:161 (illus. p. 162).

HERBARIUM RECORDS: 1840—Cols., Sullivant; 2 Jun 1888—banks of Scioto R., Selby; Aug 1890—Big Walnut, near Cols., Selby; 10 Aug 1890—Westerville, E. V. Wilcox; 29 Aug 1892—Georgesville, Bogue; 15 May 1896—Cols., E. M. Wilcox; 9 Jul 1897—Cols., Osburn; 20 Jun 1901—Marble Cliff, Mead; 16 May 1937—Cedar Swamp Westerville, rocky banks of streams, Brooks, Barghoorn & Howard (MU); 5 Oct 1982—Highbanks Metro Park (Franklin & Delaware Cos.), floodplain, G. Moore 275; 22 May 1986—W facing slope along the Scioto R. near intersections of Henderson Rd. & Rt. 33, Taylor-Lehman 62; 23 May 1986—Highbanks Metro Park (Delaware Co.), dry bluff tops, Watts 308; 25 May 1987—Highbanks Metro Park (Franklin Co.), open area near Olentangy R., common, Witsberger 946; 23 Jun 1991—E bank of Scioto R., James T. Thomas Park, from Lane Rd. to Lane Ave., Upper Arlington, Perry Twp., Lowden 4726; 31 May 1993—E bank of Scioto R., ¼ mi. S of Fishinger Rd. bridge, Perry Twp., Lowden 5064.

### 2. **SPIRAEA** L. Spiraea

Shrubs; leaves simple; flowers small, in terminal or lateral umbels, corymbs, or panicles; sepals 5; petals 5, white to rose-color; stamens 10-many; carpels usually 5, separate, 2-several ovules in each; fruit an aggregate of follicles.

*Spiraea prunifolia* Siebold & Zucc. (native of E Asia) and *S. bumalda* Burv. are cultivated species on the OSU campus.

- a Flowers in umbels, corymbs, or racemes.
- b Leaves elliptic or oblong, denticulate; flowers often double, in 3-6 flowered sessile umbels.  
*S. prunifolia* Siebold & Zucc.
- b' Leaves rhombic-ovate or obovate, toothed toward tip; flowers in corymbs or racemes. 1. *S. vanhouttei*
- a' Flowers in terminal panicles. 2. *S. alba*

1. *\*Spiraea vanhouttei* (Briot) Zabel

Bridal Wreath

Cultivated Ornamental to Escaped

Shrub; leaves rhombic-ovate to obovate, few-toothed above; corymbs or racemes peduncled; flowers profuse, terminating short leafy branches; 5 sepals; 5 petals, white; stamens shorter than petals; carpels 5.

HERBARIUM RECORDS: 8 May 1982—434 E. Kossuth St., Cols., *Kromer 36*; 30 Apr 1985—W side of Neil Ave., between 9th Ave. & 10th Ave., cult., *Crowell*; 11 May 1986—141 E. 12th Ave., E of Indianola St., Cols., *Hollander 031*; 21 May 1986—Park of Roses, Cols., *Blanco*; 3 May 1988—OSU campus, Neil Ave. S of Pomerene Hall, cult., *M. Hoffman 52*; 23 May 1989—Overbrook Drive Ravine, E of N. High St. & S of E. Cooke Rd., escape, Clinton Twp., *Lowden 4076*.

2. *Spiraea alba* Du Roi var. *alba*

Meadow-sweet, Meadow Spiraea

Shrub to 2 m high, twigs dull brown or yellow-brown; leaves finely toothed, simple, oblanceolate, narrow, widest above the middle; blades green and not tomentose beneath; inflorescence compound, branched, paniculiform, elongate, longer than wide; hypanthium, inflorescence-axis, and pedicels puberulent; flowers white, seldom pinkish; sepals 5; petals 5; carpels usually 5.

REFERENCES: Riddell 1834:118 (*Spiraea lobata* & *Spiraea salicifolia*, wet prairies); Sullivant 1840:17 (*Spiraea lobata* Murray; *Spiraea salicifolia* L., Indian Pipe Shank); Selby & Craig 1890:9 (*Spiraea lobata* Jacq. & *Spiraea salicifolia* L.); Braun 1961:161 (illus. p. 162).

HERBARIUM RECORDS: 1840—Cols., *Sullivant*; 8 Jul 1891—Westerville, *Selby*; 3 Jul 1892—Cols., *E. V. Wilcox*; [ca. 1911]—Westerville, meadows, low ground, *Hanawalt*.

NOTE: References to *Spiraea salicifolia* L. have been placed here based on specimens of *Spiraea alba* labeled as such.

### 3. ARUNCUS L. Goat's-beard

Tall herb; leaves alternate, 2-3 times compound, without stipules; leaflets ovate to lanceolate, acuminate, doubly serrate; dioecious; flowers small, each kind with rudiments of the other sporophylls; sepals 5; petals 5, white, about 1 mm long; stamens 15 or more; carpels usually 3, separate, becoming follicles.

1. *Aruncus dioicus* (Walter) Fernald

Goat's-beard

REFERENCE: Sullivant 1840:17 (*Spiraea aruncus* L. var. *hermaphrodita* Michx.).

NOTE: No specimens seen from Franklin Co.

### 4. PORTERANTHUS Britton Indian-physic

Herbs; leaves trifoliolate, almost sessile, stipuled, leaflets lanceolate, acuminate, serrate or incised or of lower leaves sometimes pinnately divided; flowers in open terminal panicles; hypanthium cylindrical to campanulate; sepals 5; petals 5, 1-2 cm long, white or pink; stamens 10-20; carpels 5, separate, slightly united at first, becoming 2-4-seeded follicles. (*Gillenia* Moench, a preoccupied name)

a Stipules ovate, incised; leaflets serrate or incised, of the lower leaves often pinnately divided. 1. *P. stipulatus*

a' Stipules linear, awl-shaped, entire or slightly incised; leaflets serrate. 2. *P. trifoliata*

1. *\*Porteranthus stipulatus* (Muhl.) Britton

American Ipecac, Midwestern Indian Physic

Cultivated (native of Ohio)

Stipules ovate, lacinate-toothed. Syn.: *Gillenia stipulata* (Muhl.) Trel.

HERBARIUM RECORD: 4 Jul 1892—Cols., cult., *Werner (CLM)*.

NOTE: Sullivant 1840:17 (*Gillenia stipulacea* Nutt.) and Selby & Craig 1890:9 (*Gillenia stipulacea* Nutt.) reported on plants collected in adjacent counties.

ARUNCUS  
PORTERANTHUS  
FRAGARIA  
DUCHESNEA  
WALDSTEINIA



2. \*†*Porteranthus trifolius* (L.) Britton  
Cultivated (native of Ohio)

Bowman's root, Mountain Indian-physic

Herbs; leaves trifoliate; stipules linear, awl-shaped, entire or slightly incised; leaflets lanceolate, acuminate, serrate; flowers in open panicles, hypanthium approx. 5-6 mm long; sepals 5; petals 5, 1-2 cm long, white or pink; stamens 10 or more; carpels 5; follicles 2-4 seeded. Syn.: *Gillenia trifoliata* (L.) Moench  
HERBARIUM RECORD: 1 Jun 1939—OSU garden, with plants from the Great Smokies, C. Jones.

5. FRAGARIA L. Strawberry

Herbs with stolons; leaves basal; leaflets 3, obovate, cuneate at base, serrate; flowers in cymose clusters; sepals 5, alternating with bracts, sepals and bracts persistent in fruit; petals 5, white; stamens many; carpels many, separate; style attached to side of ovary; fruit consisting of fleshy receptacle with dry achenes scattered over surface.

- a Sepals spreading or reflexed in fruit; achenes not in pits; leaflets nearly sessile. 1. *F. vesca*, peduncles and petioles with abundant spreading hairs, var. *vesca*  
a' Sepals appressed around young fruit; achenes in pits on receptacle; leaflets obviously stalked. 2. *F. virginiana*

1. *Fragaria vesca* L. var. *vesca*  
Naturalized (native of SE Canada)

Thin-leaved Wild Strawberry

Leaflets somewhat sessile, more or less silky beneath; leaf-teeth sharp, divergent, the terminal one usually surpassing the adjacent lateral ones; peduncles and petioles with abundant spreading hairs; petals 5-7 mm long.  
HERBARIUM RECORDS: Jun 1888—Cols., Craig; 22 May 1899—Big Darby, Cols., Selby; 8 May 1981—Alum Creek Dr. & Bixby Rd. along N side of Big Walnut Creek, Albanese 8.

2. *Fragaria virginiana* Duchesne

Thick-leaved Wild Strawberry

Leaflets usually stalked; leaf-teeth blunt, hardly divergent, the terminal tooth usually surpassed by the adjacent lateral ones; petals 7-10 mm long.

REFERENCES: Riddell 1834:118; Sullivant 1840:17; Selby & Craig 1890:9.

HERBARIUM RECORDS: 1889—Scioto R., Selby; 13 Jun 1892—Cols., Werner; 6 May 1893—Georgesville, W. Kellerman; 20 May [yr.?]—OSU Campus, Geil; 22 May 1901—N Cols., Dickey; 4 May 1921—Westerville, Halderman; 4 Jun 1924—Westerville, damp woods, R. Nichols; 1 May 1970—corner of Kenny Rd. & Ackerman Rd., University woodlot, Boone 100; 5 May 1977—Ohio School for the Deaf, off Morse Rd., open field, Tyrrell 57; 19 May 1982—NW corner of Union Cemetery W of Olentangy River Dr., field, Eckard 32; 29 May 1988—Highbanks Metro Park, old field, Morawetz (OS, OWU).

6. DUCHESNEA Sm. Indian Strawberry

Leaves basal, alternate on stolons; leaflets 3, crenate; flowers solitary, axillary, on horizontal stems; sepals 5, alternating with foliaceous 3-toothed bracts; petals 5, yellow; stamens many; carpels many; fruit resembling that of strawberry but insipid in taste and not juicy.

1. \**Duchesnea indica* (Andrews) Focke  
Naturalized (native of Asia)

Indian Strawberry

Scapose herbs, low; leaves basal, leaflets 3; flowers solitary, axillary, on horizontal stems; sepals 5, alternating with broader foliaceous 3-lobed or toothed bracts; petals 5, yellow; fruit resembling that of strawberry, not juicy.

HERBARIUM RECORDS: 1957—Cols., 1528 Lincoln Rd., in lawn, Bowman; 6 May 1977—OSU Campus, N of President's home, Cols., W. Carr 182; 13 May 1980—vicinity of Indianola Ave. & 16th Ave., lawn weed, SE corner NW Cols. Quad., W. Carr 2741 (MU, OS); 23 Apr 1986—along 12th Ave. between Botany Greenhouse & the Dentistry Bldg., in lawn, Cols., Taylor-Lehman 36; 22 Apr 1987—OSU Campus, behind B&Z Bldg., in turf, Cols., T. Lammers 6078; 26 May 1988—OSU campus, S edge of parking lot, S of Mendenhall Lab., Gerberick 48; 8 May 1989—Overbrook Drive Ravine, between N. High St., & E. Cooke Rd., Clinton Twp., Lowden 4031; 31 May 1990—Tuttle Park, just N of Hudson St., along E bank of Olentangy R., open woody area, Clinton Twp., Lowden 4372; 10 Jun 1991—Boyer Park at end of Park St., E of Rt. 3, Westerville, Blendon Twp., Lowden 4682.

7. WALDSTEINIA Willd. Barren Strawberry

Low herb; leaves basal, leaflets 3, cuneate at base, toothed, lacinate, or shallowly lobed; flowers few to several in a corymb; sepals 5; bracts small and sometimes deciduous; petals 5, yellow, 1 cm long or less; stamens many; carpels 2-5, separate, becoming achenes.

1. †*Waldsteinia fragarioides* (Michx.) Tratt.

Barren Strawberry, Dry Strawberry

Herb, low scapose; leaves basal, 3-foliolate, leaflets irregularly lobed or toothed; petioles elongate; peduncle bracteate, branched, bearing a few flowers; petals yellow; stamens many; carpels 2-5, separate, becoming achenes.

REFERENCES: Riddell 1834:118 (*Dalibarda fragarioides*); Riddell 1835:20 (*Dalibarda fragarioides*, Worthington, woods); Sullivant 1840:17 (*Comaropsis fragarioides* DC., Dry Strawberry); Selby & Craig 1890:9; Selby 1891a:111a (#244 Re-collected).

HERBARIUM RECORDS: [no date]—Franklin Co., Coll.? (URB); 9 May 1891—Big Darby, Cols., Selby (OS, WOOS); 2 May 1892—Georgesville, Werner, 6 May 1892—Georgesville, Werner (CLM, OS); 7 May 1892—Georgesville, Detmers; 14 May 1892—Georgesville, E. M. Wilcox (BGSU); 17 May 1892—Georgesville, E. M. Wilcox.

8. POTENTILLA L. Cinquefoil, Five-fingers

Herbs or shrubs; stems upright or trailing; leaves pinnately or palmately compound; sepals 5 or 4, alternating with as many bracts, sepals and bracts persistent in fruit; petals 5 or 4; stamens 5-many; carpels many, separate, each 1-ovuled, on a dry receptacle; style attached to side or tip of ovary, sometimes nearly basal; fruit an aggregate of achenes.

The Shrubby Cinquefoil, †*Potentilla fruticosa* L., is commonly cultivated as a garden ornamental. Not mapped for Franklin Co. by Braun 1961:199 (illus. p. 202).

a Shrub; leaves pinnately compound; leaflets 5-7, narrow, entire; stipules dry, sheathing; petals yellow; achenes pubescent. *P. fruticosa* L., Shrubby Cinquefoil

a' Herbs; leaves pinnately or palmately compound; leaflets toothed; achenes glabrous.

b Flowers solitary, or rarely 2, in axils; stems trailing.

c Leaves fully grown at anthesis; leaflets, except of lowest leaves, elliptic or oblanceolate, upper 3/4 of margin toothed, lower 1/4 entire; veins on lower side of distal half of bracts evident; several lower internodes of stem erect; hairs not noticeably white. 1. *P. simplex*

c' Leaves not fully grown at anthesis; leaflets obovate, upper 1/2 rounded, fan-shaped, lower 1/2 entire, cuneate; dense pubescence of lower side of bracts obscuring veins; leaves mostly basal, stem soon prostrate; hairs white. 2. *P. canadensis*

b' Flowers in cymes; stems erect; petals yellow.

d Leaves 3-foliolate. 3. *P. norvegica*

d' Leaves, or the principal ones, 5-foliolate.

e Leaflets pubescent beneath but not silvery, crenate-dentate; stipules large. 4. *P. recta*

e' Leaflets silvery-pubescent beneath, lacinate-toothed, teeth with revolute margins; stipules small.

5. *P. argentea*

1. *Potentilla simplex* Michx.

Common Cinquefoil, Old-field Five-fingers

Herb, stems trailing; leaves palmately compound; leaflets and bracts hairy beneath; lowest flower solitary in axil of the second well developed cauline leaf, 10-15 mm wide; sepals 5; petals 5, yellow; carpels many.

REFERENCES: Riddell 1834:118; Riddell 1835:20 (Erect Cinquefoil, Worthington, open woods); Sullivant 1840:17.

HERBARIUM RECORDS: 20 Apr 1884—Neils Farm, Cols., H. Smith (CINC); 23 May 1896—Worthington, M. Wright; 8 Jul 1899—Manerva [Minerva] Park, Helfrich; 20 May 1901—N Cols., Eckman; 25 May 1911—Westerville, Hanawalt; 27 May 1922—Westerville, roadside, Detamore; 22 May 1924—Westerville, Park St., Rinehart; 18 Aug 1982—Highbanks Metro Park (Franklin & Delaware Cos.), common, W. Reed 276; 18 Aug 1982—Highbanks Metro Park (Franklin & Delaware Cos.), common, G. Moore 277; 12 May 1986—Highbanks Metro Park (Delaware Co.), woods, Watts 300 (OS, OWU); 24 May 1986—Worthington, W edge of grassy field W of Colonial Hills Elem. School, Hollander 049.

NOTE: Similar to *Potentilla canadensis*. Cronquist (p. 244) states, "Most of what has passed as *Potentilla canadensis* is properly *P. simplex*."

2. *Potentilla canadensis* L.

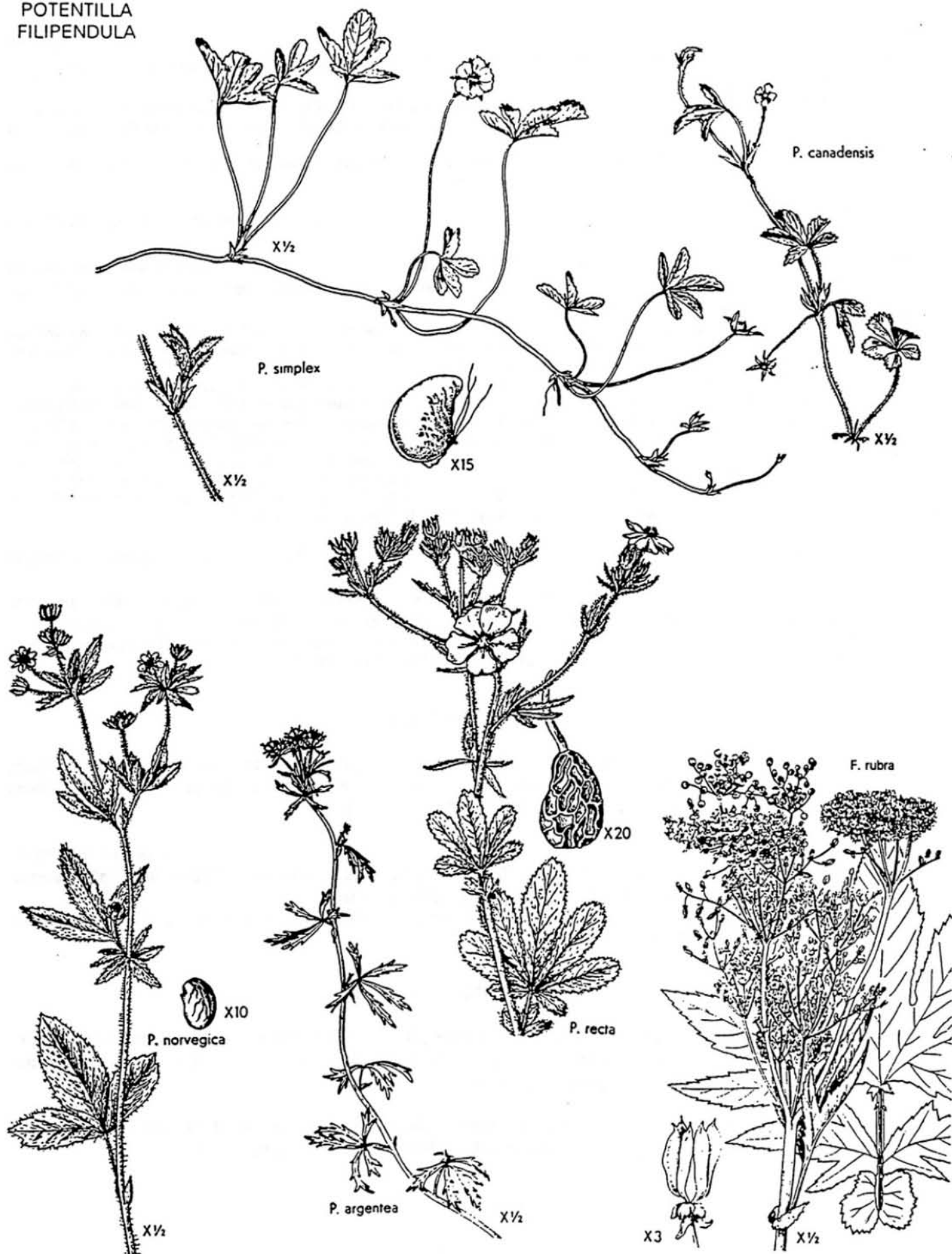
Running Five-fingers

Herb, stems trailing; leaves palmately compound; leaflets and bracts hairy beneath; lowest flower solitary in axil of the first well developed cauline leaf, 10-15 mm wide; sepals 5; petals 5, yellow; carpels many.

REFERENCES: Riddell 1834:118 (open woods); Craig 1890:78 (common on the campus E of the botanical bldg. and in the SW part of the woods); Selby & Craig 1890:9.



POTENTILLA  
FILIPENDULA



HERBARIUM RECORD: 9 May 1970—Alum Creek, occasional in open field across creek from St. Mary's of the Springs, near airport, *Boone* 128.

3. *Potentilla norvegica* L.

Strawberry-weed

Herb, stems erect; leaves palmately compound, 3-foliolate; flowers in cymes; petals yellow, stamens 15-20; carpels many; achenes usually ridged.

REFERENCES: Riddell 1834:118 (meadows; & *Potentilla hirsuta*, open woods); Riddell 1835:20 (*Potentilla hirsuta*, Hairy Cinquefoil, Worthington); Sullivant 1840:17; Craig 1890:53, 78 (occurs sparingly on the campus and in dry pastures, 12 Jun 1887, University Farm Oct 1887); Selby & Craig 1890:9.

HERBARIUM RECORDS: 27 Jun 1890—OSU Campus, Cols., coll.?; 2 Jul 1892—Cols., *Bogue*; Fall 1899—Cols., *J. H. Schaffner*; 1 Jul 1982—Blendon Woods, along access road from service area to lake, *Owens*.

4. \**Potentilla recta* L.

Upright Cinquefoil, Sulphur Five-fingers

Naturalized (native of Europe)

Herbs, stems erect; leaves palmately compound, principal ones 5-foliolate; leaflets pubescent beneath; inflorescence nearly leafless; petals more than 0.5 mm long, pale yellow; stamens 25-30, anthers more than 1.0 mm long; carpels many; mature achenes with a network of ridges.

REFERENCES: Craig 1890:53, 78 (quite abundant a little to the SE of Horticultural Hall, which is the only locality known in the vicinity of Cols., it is not given in Beardslee's "Catalogue of the plants of Ohio," having been recently introduced, it is now spreading rapidly, 8 Jun 1887, 2 Jun 1888, 5 Jun 1889, University Farm Oct 1887); Selby & Craig 1890:9 (introduced).

HERBARIUM RECORDS: Jun 1888—Cols., *Craig*; 1890—OSU grounds, Cols., *Selby*; 27 Jun 1890—OSU woods, near Cols., *E. Green*; 14 Aug 1890—OSU campus, Cols., *Werner* (CLM); 8 Jun 1892—Cols., *Addis*; 11 Sep 1892—OSU Campus, Cols., *E. M. Wilcox*; 11 Jul 1894—OSU Campus, Cols., *W. Kellerman*; 26 May 1922—Westerville, waste places, *Drury*; 3 Jul 1925—Worthington, *R. Crane* (OWU); 15 Jun 1961—Hamilton Rd., near jct. Rt. 33 & Rt. 317, Cols., *Gray & Wingo, Jr.* (BHO); 19 Jun 1973—quarry 1 mi. S of Dublin, E side of Scioto R. along Rt. 33, common, *Cahall & Roberts* 3599; 19 May 1974—OSU Botany Garden, Cols., *D. Johnson*; 4 Jun 1982—Blendon Woods, *Owens*; 14 Jun 1986—Highbanks Metro Park (Delaware Co.), field hillside, *Morawetz* 16 (OS, OWU); 20 Jun 1987—Worthington, between 5921-5945 N. High St., 1 mi. S of Rt. 161 & Rt. 23 intersection, *M. Hoffman* 3; 11 Jun 1989—jct. of Olentangy River Rd. & Henderson Rd., N Cols., Clinton Twp., *Lowden* 4134; 11 Jun 1989—RR tracks along Highland Dr., S of Henderson Rd. & W of Olentangy River Rd., Cols., Clinton Twp., *Lowden* 4142.

5. \**Potentilla argentea* L.

Silvery Cinquefoil, Silvery Five-fingers

Naturalized (native of Eurasia)

Herbs, stems erect, bases somewhat reclining; leaves palmately compound, 5-foliolate; leaflets silvery-tomentose beneath, laciniate-toothed, margins revolute; flowers in cymes; petals yellow; carpels many, becoming achenes.

HERBARIUM RECORDS: 26 Jun 1920—Dublin, *J. H. Schaffner*; 17 Jun 1922—Franklin Co., *Gordon*; 24 May 1979—Dublin, weedy field between Dublin High School & Indian Run, W of Rt. 745, Washington Twp., NW Cols. Quad., *Cusick* 19255.

9. FILIPENDULA Mill.

Tall herbs; leaves pinnately compound, with terminal leaflet large, palmately lobed and veined; stipules large; hypanthium small; flowers scarcely perigynous, 1 cm wide or less, in large panicles; sepals and petals 4-7; stamens many; carpels 5-15, separate, 2-ovuled, indehiscent and usually 1-seeded in fruit.

1. †*Filipendula rubra* (Hill) B.L. Rob.

Queen of the Prairie

Tall herb; leaves pinnately compound, terminal leaflet large and palmately 7-9-lobed; stipules large; inflorescence a panicle; flowers scarcely perigynous; petals pink; carpels not twisted in fruit.

HERBARIUM RECORD: 9 Jul 1985—W side of Graeland Shopping Center, approx. 300 feet W of margin of parking lot in back of shopping center, approx. 10 plants in field, Sharon Twp., NW Cols. Quad., *Spooner* 2890.

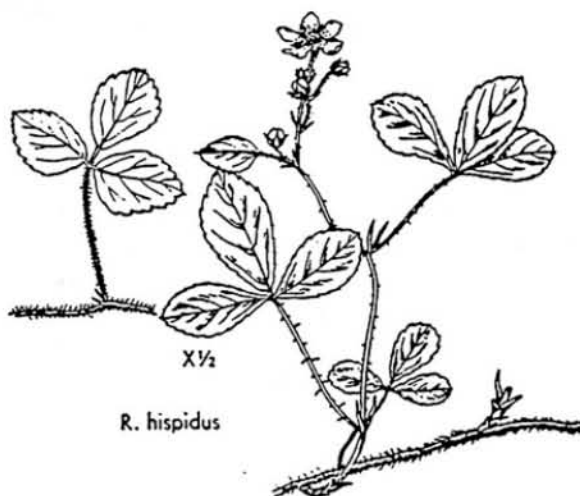
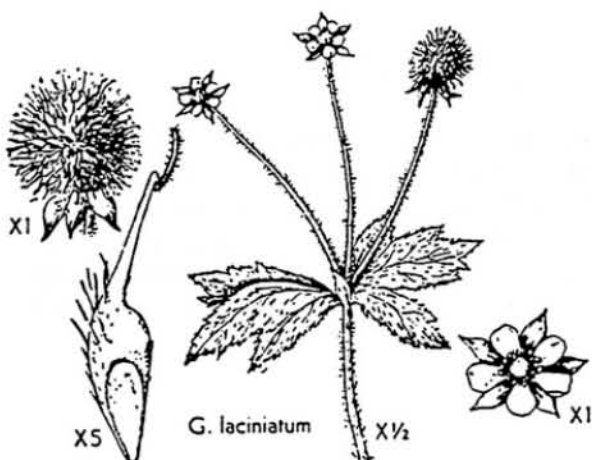
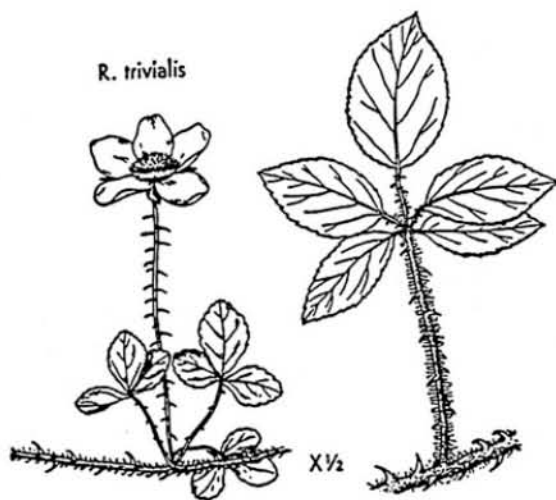
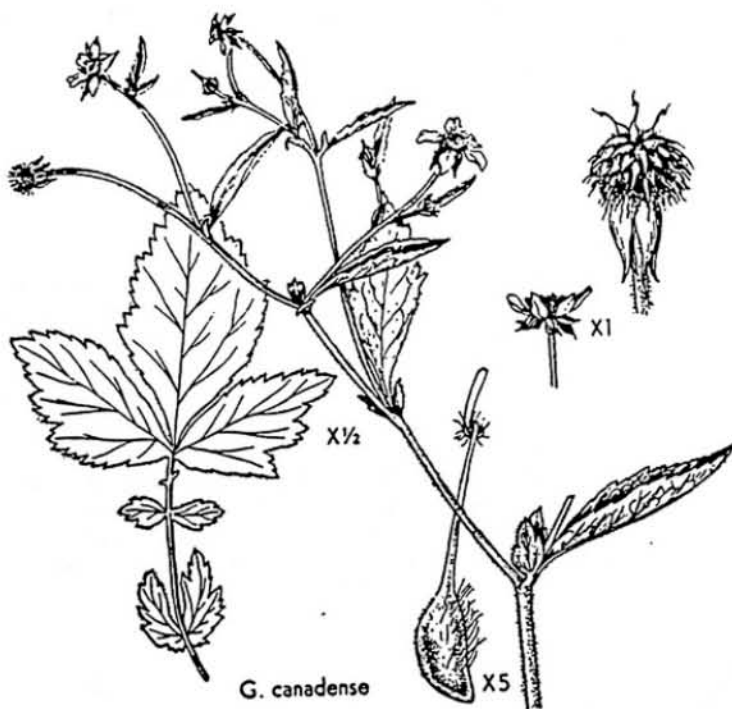
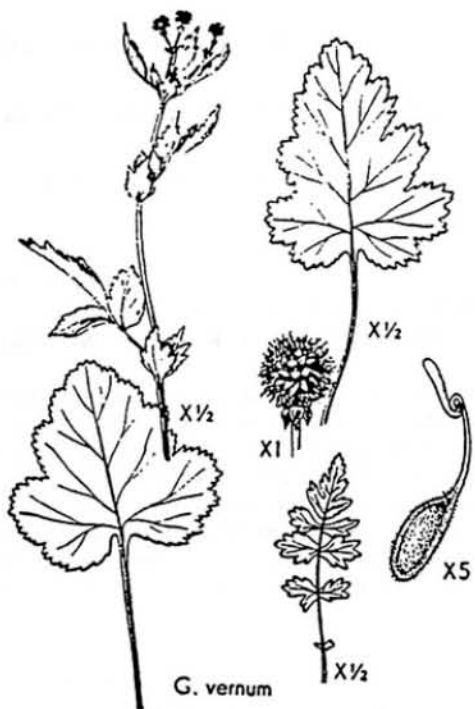
10. GEUM L. Avens

Herbs; basal and lower cauline leaves various, simple or often pinnatifid or pinnately compound, middle and upper cauline leaves usually 3-foliolate; sepals 5; petals 5; stamens many; carpels many, separate; styles persistent in fruit, jointed and becoming hooked; fruit an aggregate of achenes.

a Calyx without bracts; fruit on a stipe above hypanthium; petals 1-2 mm long, yellow. 1. *G. vernum*

a' Calyx with bracts, green, spreading; petals white or yellow; fruit sessile in the hypanthium.

GEUM  
RUBUS



- b Receptacle densely hairy; pedicels slender, minutely pubescent; fruit obovoid; achenes, except sometimes uppermost, reflexed.
- c Petals white, about as long as sepals; teeth and tips of leaves or leaflets acute; stem glabrous or sparingly pubescent. 2. *G. canadense*
- c' Petals pale yellow, much shorter than sepals; teeth and tips of leaves or leaflets blunt; stem usually hirsute below. 3. *G. virginianum*
- b' Receptacle glabrous or minutely pubescent; pedicels stout, copiously hirsute; petals white, shorter than the calyx. 4. *G. laciniatum*

1. *Geum vernum* (Raf.) Torr. & A. Gray

Spring Avens

Calyx without bracts; petals 1-2 mm long, yellow; fruit an aggregate or achenes on a stipe above hypanthium.

REFERENCES: Sullivant 1840:17 (*Stylypus vernus* Raf.); Craig 1890:78 (abundant in the woods, sparingly elsewhere, 15 May 1883, 8 May 1884, 12 May 1888); Selby & Craig 1890:9.

HERBARIUM RECORDS: 1840—Cols., Sullivant; 1890—Cols., Selby; 6 May 1890—OSU, University woods, near Cols., H. Richardson; 13 May 1892—Cols., Werner; 4 May 1895—Georgesville, Osburn; 8 May 1902—Cols., Matthews; 20 May 1904—Cols., in fields, Heugst; 25 Apr 1925—Westerville, moist banks, Camp; Late Apr 1981—rest area W side of I-71, N of Cols., Loconte 565 (MU); 22 Jul 1982—Highbanks Metro Park (Franklin & Delaware Cos.), common, W. Reed 272; 1 May 1983—Blendon Woods, Owens; 1 May 1986—E of OSU S woodlot, clearing 150 m N of Kinnear Rd. Research Center, Cols., Hollander 025; 10 May 1986—Highbanks Metro Park (Delaware Co.), open woods, Witsberger 899 (OS, OWU); 11 May 1987—Highbanks Metro Park, wet ditches & wet areas, Watts; 8 May 1989—Overbrook Drive Ravine, between N. High St. & E. Cooke Rd., Clinton Twp., Lowden 4032; 13 May 1989—along W side of Big Darby Creek, ¼ mi. S of Rt. 665, frequent on mesic wooded hillside, Pleasant Twp., Harrisburg Quad., McCormac 568; 6 Jun 1989—Turkey Run, between Olentangy River Rd. & Pegg Ave. just S of Highland Dr. (S of Henderson Rd.), Clinton Twp., Lowden 4114 & 4121.

2. *Geum canadense* Jacq.

White Avens

Stems sparingly pubescent or glabrous below; teeth and tips of leaves or leaflets acute; petals about as long as sepals, white; receptacle densely hairy among the achenes.

REFERENCES: Riddell 1834:118 (*Geum album*, dry prairies); Riddell 1835:20 (*Geum album*, prairies 12 mi. E of Worthington); Craig 1890:78 (*Geum album* Gmel., rather common in the woods, 9 Jul 1882, 13 Jun 1887); Selby & Craig 1890:9 (*Geum album* Gmel.).

HERBARIUM RECORDS: 1840—Cols., Sullivant; Jun 1888—Cols., Craig; 24 Jul 1890—OSU Campus, near Cols., Hine; 24 Jul 1890—Cols., Hine; 1891—Cols., Selby; Jul 1891—Cols., Selby; 30 Jun 1963—along E bank of Olentangy R., N of Lane Ave., common in woods, Cusick; 4 Jul 1972—Alton-Darby Creek Rd. & Cole Rd., very common in woodlot, D. Keil 9336; 4 Jul 1980—valley of Hayden Run, S of Hayden Run Rd., 0.1-0.2 mi. E of jct. with Dublin Rd., NE corner of Norwich Twp., NW Cols. Quad., Shelly 51 (MU); 6 May 1982—Highbanks Metro Park (Franklin & Delaware Cos.), G. Moore 274; 7 Jun 1982—Blendon Woods, Owens; 8 Jun 1986—Highbanks Metro Park (Delaware Co.), common, edge of forest, Witsberger 915 (OS, OWU); 11 Jun 1987—Tuttle Park, along E bank of the Olentangy R., between Lane Ave. & Dodridge St. bridges, frequent in mesic woods on floodplain, T. Lammers 6121; 16 Jun 1991—Indian Springs Dr., just off N. High St., Beechwood area, Clinton Twp., Lowden 4700.

3. *Geum virginianum* L.

Cream-colored Avens

Stems hirsute below; leaves larger and more coarsely toothed and tips blunt; petals half or two-thirds as long as the sepals, yellowish-white; receptacle densely hairy among the achenes.

REFERENCES: Riddell 1834:118 (open woods); Sullivant 1840:17 (White Avens); Craig 1890:78 (with *Geum album* [= *Geum canadense*], but less frequent); Selby & Craig 1890:9.

HERBARIUM RECORD: 27 Aug 1901—Georgesville, Coberly.

4. *Geum laciniatum* Murray

Rough Avens

Petals shorter than sepals, white; pedicels hirsute; receptacle glabrous or inconspicuously short-hairy.

HERBARIUM RECORDS: Aug 1899—Cols., Selby; 30 Jun 1963—E bank of Olentangy R., directly W of French Field House, marshy ground, Cusick; 16 Jun 1989—Highbanks Metro Park (Delaware Co.), old field, pond bank, Morawetz 97 (OS, OWU); 12 Jun 1992—Pickerington Pond, locally common in low muddy ground along shores of kettle lake, Madison Twp., Reynoldsburg Quad., McCormac 4707.

11. RUBUS L. Blackberry, Raspberry, Dewberry

Usually shrubs; stems erect or trailing, often prickly; stems of first year usually unbranched and not flowering (primocanes); from these, the second year, short flowering branches (floricanes) grow; leaves lobed or pinnately or palmately compound, sometimes different on the two kinds of stems; flowers bisporangiate or monosporangiate, in terminal or axillary racemes, corymbs, or panicles, or rarely solitary; sepals usually 5; petals 5, white, rarely rose-color or pink; stamens many; carpels many, separate, each with 2 ovules, on a convex or elongate dry or fleshy receptacle; fruit an aggregate of 1-seeded drupelets readily separable from a dry receptacle or remaining attached to a fleshy receptacle.

Reports on the Sand Blackberry, *Rubus cuneifolius* Pursh, were made by Craig 1890:77 (found in the same localities as *Rubus flagellaris* but more sparingly, 27 May 1887), and Kellerman & Werner 1893:228. I have seen no specimens from Franklin Co.; Braun (1961) did not treat it for Ohio.

- a Blades white-downy beneath; stems bristly or prickly or both.
  - b Calyx equaling or slightly longer than petals; stems bristly or prickly or both, or nearly smooth; fruit red (rarely yellow). 2. *R. idaeus* var. *strigosus*
  - b' Calyx much longer than petals; stems very glaucous, not bristly but with stout recurved prickles; pedicels prickly; fruit purple-black. 1. *R. occidentalis*
- a' Blades not white-downy beneath; stems prickly or occasionally unarmed, not glaucous; drupelets not separating from receptacle.
  - c Bladelets laciniate-cleft; calyx lobes with foliaceous appendages. 8. *R. laciniatus*
  - c' Bladelets not laciniate-cleft.
    - d Stems trailing or low-arched, often rooting at tips, with erect or ascending flowering branches; flowers solitary or clusters few-flowered.
      - e Stems with bristles; leaves coriaceous, evergreen or nearly so, central leaflet not acute or acuminate; petals 5-9 mm long. 4. *R. hispidus*
      - e' Stems with a few thick-based slightly curved prickles; leaves not coriaceous, central leaflet acute; petals 1-1.5 cm long. 5. *R. flagellaris* (See e".)
      - e" Stems with both bristles and prickles; leaves of primocanes 5-foliolate, central leaflet with bristly and prickly petiole; petals 7-10 mm wide. 3. *R. trivialis*
    - d' Stems erect or ascending; inflorescence with several to many flowers. (Blackberries)
      - f Inflorescence conspicuously stipitate-glandular, not leafy. 6. *R. allegheniensis*
      - f' Inflorescence glandless or nearly so, some pedicels subtended by leaflike bracts. 7. *R. pensilvanicus*

1. *Rubus occidentalis* L.

Black Raspberry

Stems erect, not glandular, strongly glaucous the first year, sparsely beset with stout, straight or hooked prickles with expanded bases; leaflets mostly 3, white downy or white-felted beneath; pedicels especially prickly; petals white, shorter than sepals; fruits purple-black.

REFERENCES: Riddell 1834:118; Sullivant 1840:17; Craig 1890:77 (this species, like *Rubus flagellaris* & *Rubus cuneifolius*, is found around the island and near the river, 1 Jun 1882, 28 May 1883, 21 May 1884, 26 May 1885, 30 May 1887, 27 May 1888); Selby & Craig 1890:9; Braun 1961:205 (illus. p. 204).

HERBARIUM RECORDS: 1840—Cols., Sullivant; Spring 1889—Cols., Craig; 27 Aug 1901—Georgesville, Coberly; 17 Jul 1971—W of Olentangy River Rd., approx. ½ mi. N of Henderson Rd., common at edge of woods, Clinton Twp., Roberts 1336; 23 Aug 1982—Blendon Woods, common, Owens; 8 Sep 1982—Highbanks Metro Park (Franklin & Delaware Cos.), common, G. Moore 284; 8 Sep 1987—Highbanks Metro Park (Delaware Co.), shale creek woods, B. Reed; 6 Jun 1989—Turkey Run, between Olentangy River Rd. & Pegg Ave. just S of Highland Dr., S of Henderson Rd., Clinton Twp., Lowden 4113.

2. †*Rubus idaeus* L. var. *strigosus* (Michx.) Maxim.

Wild Red Raspberry

REFERENCE: Riddell 1834:118 (*Rubus strigosus*).

NOTE: No specimens seen from Franklin Co. Not mapped for Franklin Co. by Braun 1961:203 (illus. p. 204). Not sure of var., thus status as a threatened taxon (var. *strigosus*) is questionable.

3. †*Rubus trivialis* Michx.

Southern Dewberry, Coastal-plain Dewberry

REFERENCES: Riddell 1834:118; Sullivant 1840:17; Selby & Craig 1890:9.

NOTE: No specimens seen from Franklin Co. Not mapped for Franklin Co. by Braun 1961:205 (illus. p. 204). Both Roberts & Cooperrider 1982:56 and Braun 1961:205 say known only from Hamilton Co.

4. †*Rubus hispidus* L.

Hispid Dewberry, Swamp-dewberry

REFERENCE: Selby & Craig 1890:9.

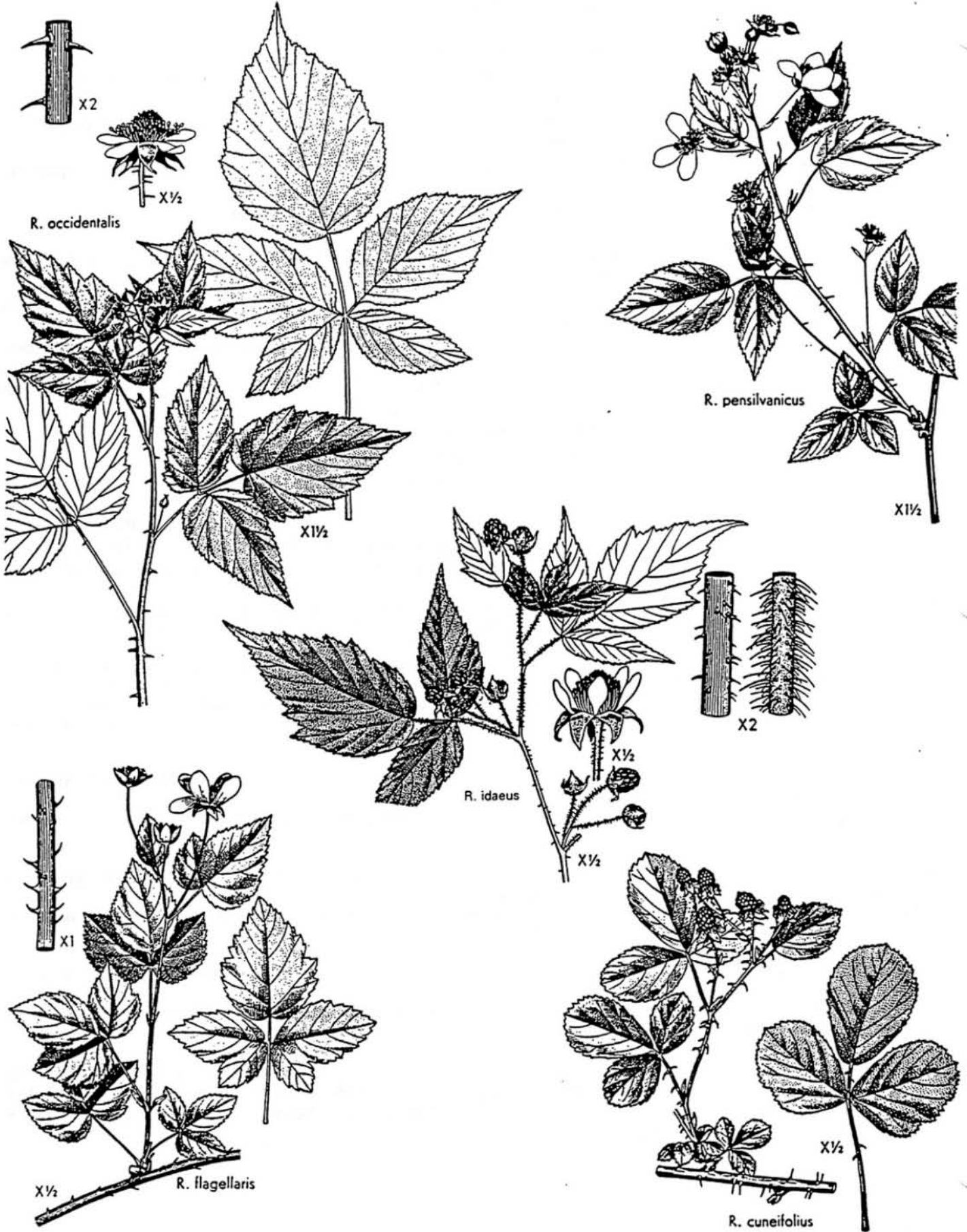
NOTE: No specimens seen from Franklin Co. Not mapped for Franklin Co. by Braun 1961:207 (illus. p. 206). Not sure of var., thus status as an endangered taxon (var. *hispidus*) is questionable.

5. *Rubus flagellaris* Willd.

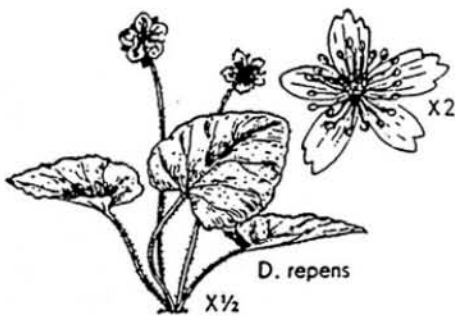
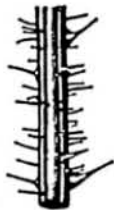
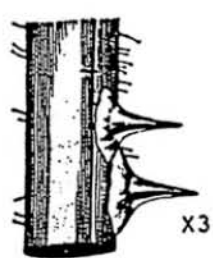
Northern Dewberry, Common Dewberry

Stem woody, low-arching, long and prostrate, rooting at the tip; prickles stout, stiff, commonly hooked, bristles none, sometimes minute glandular hairs present; leaves 3-foliolate, central leaflet acute; flowers occasionally solitary and terminal, or 3-5. Syn.: *R. villosus* Aiton

RUBUS



RUBUS  
DALIBARDA  
AGRIMONIA  
SANGUISORBA



*D. repens*

X $\frac{1}{2}$



X2



X3



*R. allegheniensis*

X $\frac{1}{2}$



*A. gryposephala*

X $\frac{1}{2}$



*A. parviflora*

X $\frac{1}{2}$



*A. pubescens*

X $\frac{1}{2}$

X3

X5



*A. eupatoria*

X3



*S. canadensis*

X $\frac{1}{2}$

X4

REFERENCES: Riddell 1834:118; Sullivant 1840:17; Craig 1890:77 (common on the island around the swamp, 16 May 1883, 1 Jun 1884, 26 May 1885, 15 May 1887, 28 May 1888); Selby & Craig 1890:9; Braun 1961:207 (illus. p. 206).

HERBARIUM RECORDS: 22 Aug 1901—Georgesville, *Coberly*; 24 May 1979—between Dublin High School & Indian Run, W of Rt. 745, weedy field, Dublin, Washington Twp., NW Cols. Quad., *Cusick 19256*.

6. *Rubus allegheniensis* Porter

Common Blackberry

Stems erect, prickles stout, spreading at right angles or barely reflexed, flattened at base; leaves compound, softly pubescent beneath; terminal leaflet ovate-oblong, long-acuminate, rarely over 3/5 as wide as long, lateral leaflets usually 4, smaller; prickles of petioles, pedicels and midveins hooked; inflorescence racemose, elongate, stipitate-glandular, the lower 1 or 2 flowers subtended by leaves, others by leaf-like bracts only.

HERBARIUM RECORDS: [ca. 1830s]—Worthington, *Dr. Paddock* (URB); 22 Aug 1901—Georgesville, *Coberly*; 30 May 1911—Westerville, edge of thicket, *Hanawalt*; 7 Jun 1923—Westerville, hillside, *Royer*; [ca. 1982]—Blendon Woods, common, *Owens*; 25 May 1982—Highbanks Metro Park (Franklin & Delaware Cos.), common, *Brauning 282*; 8 Sep 1982—Highbanks Metro Park (Franklin & Delaware Cos.), common, *G. Moore 283*; 20 Sep 1982—Highbanks Metro Park (Franklin & Delaware Cos.), common, *G. Moore 281* (mixed & filed with *Rosa multiflora*); 24 Jul 1986—Highbanks Metro Park (Delaware Co.), open fields and wood edges, *Kosko*; 8 Sep 1987—Highbanks Metro Park (Delaware Co.), shale creek woods, *B. Reed*.

NOTE: Not mapped for Franklin Co. by Braun 1961:209 (illus. p. 206). All specimens are sterile except for the flowering specimen of *Moore 281*.

7. *Rubus pensilvanicus* Poir.

Pennsylvania-blackberry

Stems stout, prickles spreading or slightly reflexed; leaves compound, 3- or 5-foliolate, softly pubescent beneath; terminal leaflet broadly ovate, at least half as wide as long; prickles on petioles and midveins, somewhat hooked, in much weaker form on the pedicels; inflorescence hardly extended, with at most only a few stipitate-glandular hairs.

Syn.: *R. frondosus* Bigelow

REFERENCE: Braun 1961:210 (illus. p. 208).

HERBARIUM RECORDS: 30 May 1937—N Cols., *J. H. Schaffner*; 12 May 1986—Highbanks Metro Park (Delaware Co.), field, *Watts 304* (OS, OWU); 25 May 1987—Highbanks Metro Park (Franklin Co.), open area near Olentangy R., common, *Witsberger 941*; 6 Jun 1989—Turkey Run, between Olentangy River Rd. & Pegg Ave., just S of Highland Dr., S of Henderson Rd., Clinton Twp., *Lowden 4112*.

NOTE: Selby & Craig 1890:9 reported *Rubus canadensis* L. (Smooth Blackberry). No specimens seen from Franklin Co.; mentioned by Braun 1961:209 for Ohio. Perhaps this reference applies to the much like *Rubus pensilvanicus*.

8. \**Rubus laciniatus* Willd.

Cutleaf Blackberry, Evergreen Blackberry

Adventive (European cultigen of Old World origin)

Stems coarse, scrambling, strongly armed with flattened, recurved prickles; leaves evergreen, 3- or 5-foliolate, laciniately cleft or again compound and cleft, green beneath.

HERBARIUM RECORDS: 25 Sep 1919—Cols., *J. H. Schaffner*; 1 Jun 1928—Clinton Twp., waste ground, *J. H. Schaffner*; 17 Nov 1986—Whittier St., just NW of entrance to Lower Scioto Park, local, one extensive colony on weedy roadside, SW Cols. Quad., *Cusick 26196*.

NOTE: See Braun 1961:205.

12. DALIBARDA L. Dewdrop

Low pubescent herb with prostrate stem; leaves basal, blades simple, round-ovate, cordate, 3-5 cm long; flowers of 2 kinds, usually sterile petaliferous ones solitary or 2 together on upright scape, and fertile apetalous cleistogamous ones on recurved scapes; sepals 5 or 6, bractless; petals 5, white, 4-8 mm long; stamens many; carpels 5-10; fruit an aggregate of nearly dry drupes.

1. †*Dalibarda repens* L.

Robin-run-away, False Violet, Spice-root

REFERENCES: Riddell 1834:118; Riddell 1835:20 (Worthington).

NOTE: No specimens seen from Franklin Co.

13. AGRIMONIA L. Agrimony

Erect herbs; leaves pinnately compound, small leaflets interspersed with larger ones; stipules large, toothed or lacinate; flowers small, in narrow, often interrupted, spikelike racemes; hypanthium hemispheric or turbinate, at maturity with band of hooked bristles just below base of sepals; sepals 5; petals 5, yellow; stamens 5-15; carpels 2, separate, enclosed by but free from persistent hypanthium, which becomes hardened in fruit around the 2 achenes.

a Hypanthium evidently hirsute on the ribs as well as in the furrows. 4. *A. eupatoria*



- a' Hypanthium glabrous or glandular, or sparsely strigose only in the furrows.
- b Leaves with 11-15 larger leaflets and many smaller ones; leaflets lanceolate or elliptic, gland-dotted below, those of upper and middle leaves acuminate; stem densely long-hairy. 2. *A. parviflora*
- b' Leaves with 5-9 larger leaflets, these ovate, obovate, or elliptic.
- c Axis of inflorescence glandular; lower surface of leaflets gland-dotted and glabrous or almost glabrous between veins, sometimes pubescent on veins. 1. *A. gryposepala*
- c' Axis of inflorescence pubescent but not or little glandular; blades pubescent beneath; bristles of fruit ascending. 3. *A. pubescens*

1. *Agrimonia gryposepala* Wallr.

Common Agrimony

Stems with scattered long hairs; larger leaflets mostly 5-7 lance-ovate to elliptic or obovate, lower surface gland-dotted and almost glabrous between veins, pubescent on veins; axis of inflorescence glandular; bristles of fruit in several rows on projecting flange, lower bristles becoming wide-spreading, lowest somewhat reflexed; roots not thickened.

HERBARIUM RECORDS: 1890—near Cols., Selby; 12 Jul 1982—Blendon Woods, common along woodland trails, Owens; 25 Jul 1992—Slate Run Wood Ct., edge of open woods, off Henderson Rd., ½ mi. E of Sawmill Rd., Perry Twp., Lowden 5006.

2. *Agrimonia parviflora* Aiton

Southern Agrimony

Stem densely long-hairy; larger leaflets mostly 11-12 with many smaller ones, blades lanceolate or elliptic, acuminate, gland-dotted below; axis of inflorescence finely to densely short-hairy and glandular, sometimes also with long spreading hairs.

REFERENCES: Riddell 1834:118 (open woods); Selby & Craig 1890:9.

HERBARIUM RECORDS: [ca. 1834]—Cols., Lapham (CINC); Aug 1890—Neil's Run, Cols., Selby; 10 Aug 1890—Neils Run, Cols., Selby (WOOS); 11 Aug 1890—Neil's Run, Cols., Hine; 14 Aug 1892—Alum Creek, near Cols., E. M. Wilcox; 14 Aug 1892—Cols., E. M. Wilcox; 16 Aug 1898—OSU Botanical Gardens, Cols., J. H. Schaffner; 30 Jul 1982—Blendon Woods, Owens; 16 Aug 1987—Highbanks Metro Park (Delaware Co.), edge of woods, locally common, Wütsberger 955; 3 Aug 1990—S side of McOwen Rd. just W of Dixon Rd. (near Franklin/Licking Co. line), open woody area, Jefferson Twp., Lowden 4503.

3. *Agrimonia pubescens* Wallr.

Downy Agrimony

Roots thickened; larger leaflets mostly 5-9, blades acute or obtuse, pubescent and obscurely gland-dotted beneath; axis of inflorescence pubescent, not glandular; mature hypanthium less than 4 mm long, minutely strigose in the deep furrows only; roots thickened.

REFERENCE: Furlow (1991).

NOTE: No specimens seen from Franklin Co. Perhaps Furlow (1991) based his record on specimens that are *Agrimonia eupatoria* which has hirsute hairs in the furrows and on the ribs.

4. \**Agrimonia eupatoria* L.

Medicinal Agrimony

Naturalized (native of Eurasia)

Stems long and short hairy; axis of inflorescence pubescent, eglandular; larger leaflets mostly 5; blades pubescent and obscurely gland-dotted beneath; hypanthium hirsute on the ribs as well as in the furrows.

REFERENCES: Riddell 1834:118 (marshes); Sullivant 1840:17; Craig 1890:78 (occurs sparingly in the woods, 27 Jul 1882, 24 Jul 1887); Selby & Craig 1890:9.

HERBARIUM RECORDS: 11 Aug 1890—Neils Run, Cols., Hine; Sep 1890—Cols., Werner (CLM); 3 Sep 1892—Cols., Werner; 22 Jul 1982—Highbanks Metro Park (Franklin & Delaware Cos.), common, G. Moore 271; 26 Jul 1986—Highbanks Metro Park (Delaware Co.), Day Camp Woods, Morawetz 24 (OWU); 26 Aug 1986—Highbanks Metro Park (Delaware Co.), day camp woods, Morawetz; 19 Jul 1987—Highbanks Metro Park (Delaware Co.), field, Higgins 23 (OS, OWU); 6 Jul 1991—OSU woods, W of Kenny Rd. & just N of Lane Ave., N of Agronomy Turfgrass Research Center, Clinton Twp., Lowden 4775.

NOTE: Weishaupt (1971) does not treat; see Cronquist (p. 254).

NOTE: Confusion between *Agrimonia pubescens* and *A. eupatoria*. Specimens best fit *A. eupatoria*, as described by Cronquist (p. 254), in that they have hypanthium hirsute on the ribs as well as in the furrows.

14. SANGUISORBA L. Burnet

Herbs; leaves pinnately compound; flowers small, monosporangiate or bisporangiate, in dense spikes or heads; hypanthium narrowed at mouth, somewhat 4-angled; sepals 4, petaloid; petals none; stamens 4 or many; carpels 2, separate, or 1, enclosed by hypanthium but free from it; hypanthium persistent in fruit, becoming hardened around the achene or achenes.

1. †*Sanguisorba canadensis* L.

American Burnet

Herb; leaves pinnately compound; leaflets oblong, 3-10 cm long; flowers small, monosporangiate or bisporangiate, in dense cylindrical spikes or heads; sepals 4, white, petaloid; petals none; stamens 4, much longer than sepals; carpels 2, separate, or 1, enclosed by hypanthium but free from it.

REFERENCES: Riddell 1834:118 (wet prairies); Riddell 1835:19 (Burnet Saxifrage, Cols., wet prairies); Sullivant 1840:18 (Burnet Saxifrage); Selby & Craig 1890:9 (*Poterium canadense* Benth. & Hook.); Selby 1892a:111 (*Poterium canadense* Benth. & Hook.; #226 Re-collected, by canal, S of city, *Bogue*).

HERBARIUM RECORDS: 1840—Cols., *Sullivant*; 4 Oct 1892—Cols., *Bogue*; 13 Aug 1898—Cols., *W. Kellerman*; 10 Sep 1901—Cols., *Mead*.

15. ROSA L. Rose

Shrubs, erect, trailing, or climbing, usually prickly; leaves pinnately compound; stipules adnate to petiole; flowers large, showy, solitary or in corymbs; hypanthium urn-shaped, narrowed at mouth, becoming fleshy in fruit; sepals 5, tips usually prolonged and sometimes foliaceous; petals 5; stamens many; carpels many, inserted on bottom, and sometimes also on sides, of hypanthium; fruit an aggregate of bony achenes, enclosed by but free from the fleshy hypanthium.

- a Styles united in a column exerted beyond opening of hypanthium.
  - b Leaflets 3, rarely 5; stipules nearly entire, glandular-ciliate; petals pink, 2-3 cm long. 1. *R. setigera*
  - b' Leaflets 7-9; stipules toothed; petals usually white; flowers about 2 cm wide. 2. *R. multiflora*
- a' Styles separate, not or only slightly exerted in a broad mass.
  - c Sepals unlike, some of them pinnatifid; prickles stout, decurved; mouth of hypanthium 1-2 mm wide.
    - d Leaves pubescent and glandular beneath; fruit subglobose; sepals persistent in fruit. 3. *R. eglanteria*
    - d' Leaves glabrous, without glands; fruit ovoid, 1.5-2 cm long, scarlet; sepals deciduous. 4. *R. canina*
  - c' Sepals alike in form; mouth of hypanthium wider than 2 mm.
    - e Pedicels and hypanthium usually glabrous; sepals persistent in fruit.
      - f Upper surface of leaflets dark green and rugose; stems densely prickly; stem and bases of prickles pubescent. 5. *R. rugosa*
      - f' Upper surface of leaflets pale green, smooth; stems glabrous, without prickles or with few near base. 8. *R. blanda*
    - e' Pedicels and hypanthium stipitate-glandular; sepals deciduous from fruit; flowers pink, about 5 cm wide; stipules narrow, sides parallel.
      - g Prickles stout, recurved; stipules with inrolled edges; leaflets pubescent beneath. 6. *R. palustris*
      - g' Prickles slender, straight; stipules not inrolled; leaflets glabrous or pubescent beneath. 7. *R. carolina*

1. *Rosa setigera* Michx.

Prairie Rose, Climbing Prairie-rose

Leaflets 3; stipules nearly entire, glandular-ciliate; petals pink, 2-3 cm long; styles united in a column exerted beyond opening of hypanthium. Syn.: *R. rubifolia* R.Br.

REFERENCES: Sullivant 1840:17 (Scioto Multiflora); Selby & Craig 1890:9; Braun 1961:213 (illus. p. 212).

HERBARIUM RECORDS: [date?]-Worthington Rd., *Craig*; 7 Aug 1890—Big Darby, Cols., *Selby*; 15 Jul 1892—Georgesville, *Bogue*; 28 Jun 1937—Bexley, Rt. 31, edge of woods, 6 mi. S of Livingston Ave., *Stover*; 15 Jun 1991—Knightbridge Blvd., just N of Henderson Rd. & W of Olentangy River Rd., woody thicket, Clinton Twp., *Lowden 4698*.

2. \**Rosa multiflora* Thunb.

Multiflora-rose

Naturalized (native of E Asia)

Stems climbing or arching; leaflets 7-9; stipules toothed; inflorescence many-flowered, flowers about 2 cm wide, white to pink; styles glabrous, united in a column exerted beyond opening of hypanthium.

HERBARIUM RECORDS: 27 Dec 1955—near (N of) Big Walnut Creek, E side of Lockbourne Rd., ½ mi. N of Rt. 665, Hamilton Twp., *E. Herrick*; 17 Jul 1971—W of Olentangy River Rd., approx. ½ mi. N of Henderson Rd., tall shrub in old field at edge of woods, Clinton Twp., *Roberts 1337*; 20 Sep 1982—Highbanks Metro Park (Franklin & Delaware Cos.), common, *G. Moore 281*; 25 May 1986—SE corner of Riverview Park Dr. & Rustic Bridge Dr., ravine, Cols., *R. Burnes 40*; 6 Jun 1989—Turkey Run, just S of Highland Dr., S of Henderson Rd. & W of Olentangy River Rd., Clinton Twp., *Lowden 4108*; 11 Jun 1989—Highbanks Metro Park (Delaware Co.), field edge, *Higgins 31* (OS, OWU).

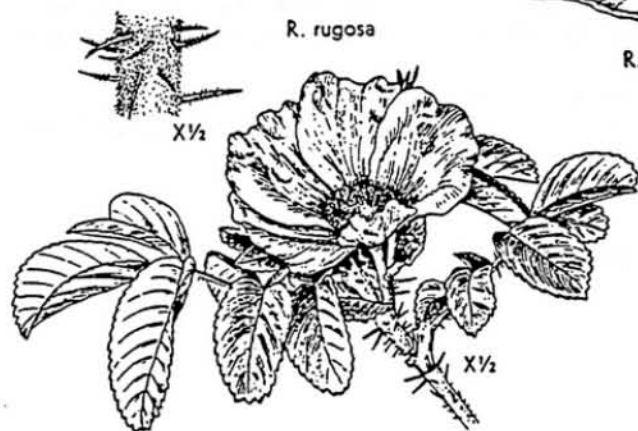
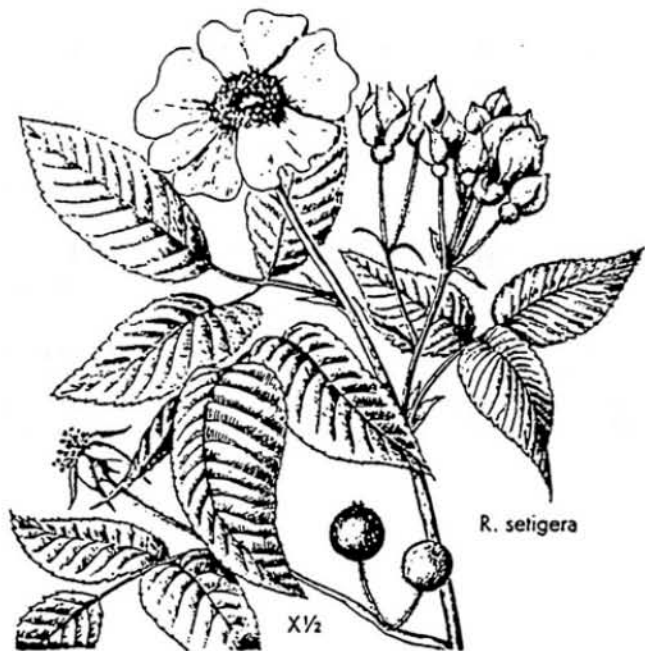
NOTE: See Braun 1961:213.

3. \**Rosa eglanteria* L.

Eglantine, Sweetbrier

Naturalized (native of Europe)

ROSA



Prickles stout, decurved; leaflets pubescent and glandular beneath; mouth of hypanthium 1-2 mm wide; sepals unlike, some of them pinnatifid, persistent in fruit; styles pubescent, separate, not or only slightly exerted in a broad mass; fruit subglobose. Syn.: *R. rubiginosa* L.

REFERENCES: Riddell 1834:118 (doubt to correctness in the natural system); Sullivant 1840:17 (naturalized); Craig 1890:78 (a single bush along the river bank E of the island and S of the spring, 23 May 1887, 7 Jun 1888); Selby & Craig 1890:9 (introduced).

HERBARIUM RECORDS: 1890—Central College, Selby; 26 Aug 1958—Hayden Run Rd., ½ mi. E of Hayden, Washington Twp., E. Herrick.

NOTE: See Braun 1961:214.

4. \**Rosa canina* L.

Dog-rose

Naturalized (native of Europe)

Prickles stout, decurved; leaflets glabrous, without glands; mouth of hypanthium 1-2 mm wide; sepals unlike, some of them pinnatifid, deciduous; styles pubescent, separate, not or only slightly exerted in a broad mass; fruit ovoid, 1.5-2.0 cm long, scarlet.

HERBARIUM RECORDS: 5 Jul 1891—Cols., Werner (CLM); 17 May 1896—Cols., W. Kellerman; 1925—Westerville, ravine bottom, Sleepy Hollow, Camp; Sep 1926—Westerville, Camp; 3 Jun 1980—W side of Rt. 33, 0.75 mi. S of Rt. 161, limestone exposures in abandoned quarry, Perry Twp., NW ¼ NW Cols. Quad., W. Carr 2876; 1 Jul 1982—Blendon Woods, edges of woodcock field, Owens; 27 May 1992—E of Indianola Ave. & N of Cooke Rd., weedy ground along RR, NE Cols. Quad., Cusick 30271; 16 Jul 1992—SW of jct. of Dublin-Granville Rd. & Karl Rd., behind shopping area, NE Cols. Quad., Cusick 30432.

NOTE: See Braun 1961:214.

5. \**Rosa rugosa* Thunb.

Japanese Rose

Naturalized (native of E Asia)

REFERENCE: Furlow (1991).

NOTE: No specimens seen from Franklin Co. See Braun 1961:215.

6. *Rosa palustris* Marshall

Swamp-rose

Prickles stout, recurved; leaflets pubescent beneath; stipules narrow, sides parallel, with inrolled edges; flowers pink; sepals alike in form; mouth of hypanthium wider than 2 mm; pedicels and hypanthium stipitate-glandular; styles separate, not or only slightly exerted in a broad mass. Syn.: *R. carolina* of various authors, not L.

REFERENCES: Riddell 1836:6 (*Rosa carolina* L., Cols., Lapham); Sullivant 1840:17 (*Rosa carolina*, Swamp Rose).

HERBARIUM RECORDS: 7 Aug 1890—Cols., Selby; 1 Jul 1891—Georgesville, Werner (CLM, OS); 8 Jul 1891—Big Run, Cols., Selby.

NOTE: See Braun 1961:214 (illus. p. 212). See note under *Rosa carolina* L.

7. *Rosa carolina* L.

Pasture-rose

Prickles slender, straight; leaflets glabrous or pubescent beneath; stipules narrow, sides parallel, margins not inrolled; flowers pink; sepals alike in form; mouth of hypanthium wider than 2 mm; pedicels and hypanthium stipitate-glandular; styles separate, not or only slightly exerted in a broad mass.

REFERENCES: Riddell 1836:6 (*Rosa lucida* Willd., Worthington); Sullivant 1840:17 (& *Rosa parviflora* Ehrh.); Selby & Craig 1890:9 (#233 & 234 *Rosa lucida* Ehrh.); Braun 1961:214 (illus. p. 212).

HERBARIUM RECORDS: Aug 1890—toward Central College, Cols., Selby; 7 Aug 1890—near Rocky Fork, Selby; 1 Jul 1891—Big Darby, Selby; 4 Jul 1891—Worthington Rd., swamp, Selby; 8 Jul 1891—Big Walnut, Selby; 30 May 1896—Reservoir Park, M. Wright; 19 Jul 1937—Rome, Stover; 14 Oct 1938—Worthington, Stover; 13 Jul 1983—Big Darby Wildlife area, 0.1-0.2 mi. SSE of jct. of Rt. 665 & Graessle Rd., open slopes above small stream, common, Pleasant Twp., Harrisburg Quad., Cusick 22723; 28 Jun 1990—Hoover Dam Park, W of entrance off Cabbage Rd., ½ mi. S of Walnut St., open thicket, Blendon Twp., Lowden 4426.

NOTE: Sullivant's (1840) reference to *Rosa carolina* might apply here, but I think it probably applies best to *Rosa palustris* based on his use of the common name, Swamp Rose.

8. †*Rosa blanda* Aiton

Smooth Rose

Shrub, stems glabrous, without prickles or with few near base; upper surface of leaflets pale green, smooth; mouth of hypanthium wider than 2 mm; pedicels and hypanthium usually glabrous; styles separate, not or only slightly exerted in a broad mass; sepals alike in form.

REFERENCES: Riddell 1834:118 (wet prairies); Selby & Craig 1890:9; Selby 1891a:111a (#232 Re-collected).

HERBARIUM RECORDS: 19 May 1985—OSU, Mirror Lake facing Neil Ave., small shrub, Chansa-Ngavej 4; 15 May 1986—½ blk. N of Antrim Park, along bike path, off Olentangy River Rd. & S of Rt. 161, Benkowski 25.

NOTE: Not mapped for Franklin Co. by Braun 1961:214 (illus. p. 212).

16. PRUNUS L. Peach, Plum, Cherry

ROSA  
PRUNUS



Shrubs and trees; leaves simple, alternate, blades serrate, pinnately veined, disklike or toothlike glands on petiole; hypanthium usually deciduous in fruit; sepals and petals 5; stamens 15 or more; carpel 1; ovules 2; fruit a 1-seeded drupe.

- a Ovary and fruit velvety; stone sculptured; leaves lanceolate, conduplicate in bud; flowers sessile or nearly so; petals pink. 1. *P. persica*
- a' Ovary and fruit glabrous; flowers pediceled; petals usually white.
  - b Flowers 15 or more in racemes that are longer than wide, at end of leafy branches of current year, appearing with or after leaves; leaves folded in bud; petals white; flowers about 1 cm wide; fruit black, globose, 8-10 mm wide.
  - c Tree; leaves lance-oblong to ovate, tapering to tip, often villous along midvein beneath; glands of petiole often toothlike; sepals persistent in fruit. 2. *P. serotina*
  - c' Shrub; leaves obovate or ovate, glabrous beneath or with tufts of hair in vein axils; glands of petiole usually rounded or disk-shaped; sepals deciduous in fruit. 3. *P. virginiana*
- b' Flowers in umbels, corymbs, or short racemes, appearing before or with the young leaves.
  - d Flowers in umbels.
    - e Flower clusters with involucre of persistent inner bud-scales and sometimes some small leaves at base; petals 10-15 mm long; leaves folded in bud.
    - f Young leaves pubescent beneath, conspicuous glands on petiole, teeth not incurved; inner bud scales spreading or reflexed; hypanthium constricted at apex. 5. *P. avium*
    - f' Young leaves glabrous beneath, teeth incurved, glands of teeth near sinus; inner bud scales erect. 6. *P. cerasus*
    - e' Flowers without persistent bud scales or bracts at base, 1.5 cm wide or more, appearing before leaves; leaves folded in bud, teeth without glands. 7. *P. americana*
  - d' Flowers in short racemes of about 6-10; blades ovate to circular, short-acuminate; fruit dark red or black. 4. *P. mahaleb*

1. \**Prunus persica* (L.) Batsch

Peach

Cultivated (native of China)

Small tree; leaves lanceolate or lance-oblong; flowers and fruits sessile or nearly so; petals pink; ovary and fruit velvety; stone sculptured.

REFERENCES: Craig 1890:77 (3 or 4 trees on the grounds, 2 of them are on the hillside SW of the botanical bldg., 7 Apr 1882, 5 May 1883, 19 Apr 1886, 15 Apr 1887, 23 Apr 1888, 13 Apr 1889); Kellerman & Werner 1893:227.

HERBARIUM RECORDS: May 1888—Cols., Craig; 30 Apr 1901—Cols., Mead; 3 May 1901—OSU Campus, Cols., Mead.

NOTE: See Braun 1961:221.

2. *Prunus serotina* Ehrh.

Wild Black Cherry

Tree; leaves lance-oblong to ovate, tapering to tip, often villous along midvein beneath; leaf teeth very short, appressed or in curved; glands of petiole often toothlike; inflorescence racemose with 15 or more flowers; sepals persistent in fruit, entire or inconspicuously glandular-erose; fruit glabrous; stone globose or subglobose.

REFERENCES: Craig 1890:77 (several fine specimens along the fence from the woods to the seed barn, also on the campus and along the river, the largest tree is 10 feet 8 inches in circumference 4 feet above the ground, 11 May 1882, 20 May 1883, 18 May 1884, 22 May 1885, 4 May 1887, 10 May 1888, 27 Apr 1889); Selby & Craig 1890:9; Braun 1961:222 (illus. p. 220).

HERBARIUM RECORDS: 1840—Cols., Sullivant; 1890—Cols., Selby; 1897—OSU Campus, Ruppertsberg 10; 1897—OSU woods, Ruppertsberg 76; 17 May 1899—Franklin Co., Fullmer; 29 May 1909—Cols., Bergin; 21 May 1971—just N of Hudson St. on N. Olentangy River Rd., old field, Roberts, Wagner, Duncan, Young, Stephenson, D. Keil 7246; 31 Apr 1977—near West Campus [OSU] pond, Hoops 20; [ca. 1982]—Blendon Woods, common, Owens; 29 Apr 1982—Highbanks Metro Park (Franklin & Delaware Cos.), common, G. Moore 278; 30 Aug 1982—Highbanks Metro Park (Franklin & Delaware Cos.), common, W. Reed 279; 8 Sep 1982—Highbanks Metro Park (Franklin & Delaware Cos.), common, W. Reed 280; 17 Jun 1986—Highbanks Metro Park (Delaware Co.), woods, Kasko; 1 Jul 1986—Highbanks Metro Park (Franklin Co.), moist slopes & lowlands, Kasko; 29 May 1989—Walnut Grove Cemetery, S Worthington, Sharon Twp., Lowden 4091.

3. *Prunus virginiana* L.

Choke Cherry

Tall shrub or small tree; leaves obovate or ovate, glabrous beneath or with tufts of hair in vein axils; leaf teeth triangular, salient or ascending; glands of petiole usually rounded or disk-shaped; inflorescence racemose with 15 or more flowers; sepals deciduous in fruit, conspicuously glandular-erose; fruit glabrous; stone globose or subglobose.

REFERENCES: Riddell 1834:118; Sullivant 1840:18 (*Cerasus virginiana* Michx. & *Cerasus obovata* Beck.); Craig 1890:77 (a few specimens grow along the river, 11 May 1882, 18 May 1883, 5 May 1884, 4 May 1887, 10 May 1888, 27 Apr 1889); Selby & Craig 1890:9; Braun 1961:222 (illus. p. 220).

HERBARIUM RECORDS: [ca. 1830s]—Worthington, *Dr. Paddock* (URB); 1840—Cols., *Sullivant*; May 1890—Cols., *Selby*; 13 May 1893—Cols., *Werner* (CLM); 11 May 1901—Marble Cliff, *Mead*; 8 May 1954—near Dublin, edge of ravine at Indian Run, *Weishaupt*; 3 May 1991—E bank of Scioto R., W of Rt. 257 just N of Rt. 161, along limestone cliffs, Perry Twp., *Lowden 4597*.

4. \**Prunus mahaleb* L.

Mahaleb-cherry

Naturalized (native of Europe)

REFERENCE: Furlow (1991).

NOTE: No specimens seen from Franklin Co. See Braun 1961:221.

5. \**Prunus avium* L.

Sweet Cherry

Adventive (native of Eurasia)

Incl. *Prunus avium* var. *duracina* (L.) W.Koch

REFERENCE: Furlow (1991).

NOTE: No specimens seen from Franklin Co. See Braun 1961:221.

6. \**Prunus cerasus* L.

Sour Cherry, Pie-cherry

Adventive (native of Eurasia)

Leaves glabrous, teeth incurved, glands of teeth near sinus; flowers in umbellate clusters, with persistent bud-scales and small leaves at base.

REFERENCES: Craig 1890:77 (several trees growing along 15 Ave. a short distance from High St., this, like *Prunus persica* sometimes springs up from seed and shows a slight tendency to spread, 18 Apr 1882, 1 May 1884, 30 Apr 1885, 27 Apr 1887, 27 Apr 1888, 16 Apr 1889); Kellerman & Werner 1893:227.

HERBARIUM RECORDS: 17 May 1911—Westerville, *Hanawalt*; 21 Apr 1988—Worthington, 226 Sanbridge, S of Rt. 161 & W of Rt. 23, cult., *M. Hoffman 30*.

NOTE: See Braun 1961:221.

7. *Prunus americana* Marshall var. *americana*

Wild Plum

Shrub or small tree; leaves obovate or oblong-ovate; blades sharply serrate, acuminate, acute to obtuse at base, teeth without glands; petiole mostly glandless; sepals pubescent above, glabrous beneath, without marginal glands.

REFERENCES: Riddell 1834:118; Sullivant 1840:18; Selby & Craig 1890:9; Braun 1961:219 (illus. p. 218).

HERBARIUM RECORDS: 7 May 1901—Cols., *Mead*; 18 May 1911—½ mi. NW of Westerville, *Hanawalt*; 17 May 1922—near Westerville, woods, *Hatton*.

## 17. CHAENOMELES Lindl.

Shrub; branches often ending in thorns; blades lustrous above, serrate; flowers epigynous, 3-5 cm wide; petals scarlet, pink, or white; stamens many; pome 3-7 cm wide.

1. \**Chaenomeles speciosa* (Sweet) Nakai

Japanese Quince

Cultivated

Shrub, ornamental; branches often ending in thorns; blades serrate, tapering at base, lustrous above; flowers epigynous; petal scarlet, pink or white. Syn.: *C. lagenaria* (Loisel.) K.Koidz.

HERBARIUM RECORDS: 20 May 1911—Westerville, *Hanawalt*; 5 May 1985—OSU Campus, Cols., *Cho 47*; 4 Apr 1986—OSU Campus, corner 12th & Neil Ave., Cols., *Di Sabato-Aust 1*; 5 Apr 1986—106 W. Patterson Ave., *Cooperband 14*; 21 Apr 1988—OSU campus, Neil Ave., S of Pomerene Hall, *M. Hoffman 29*.

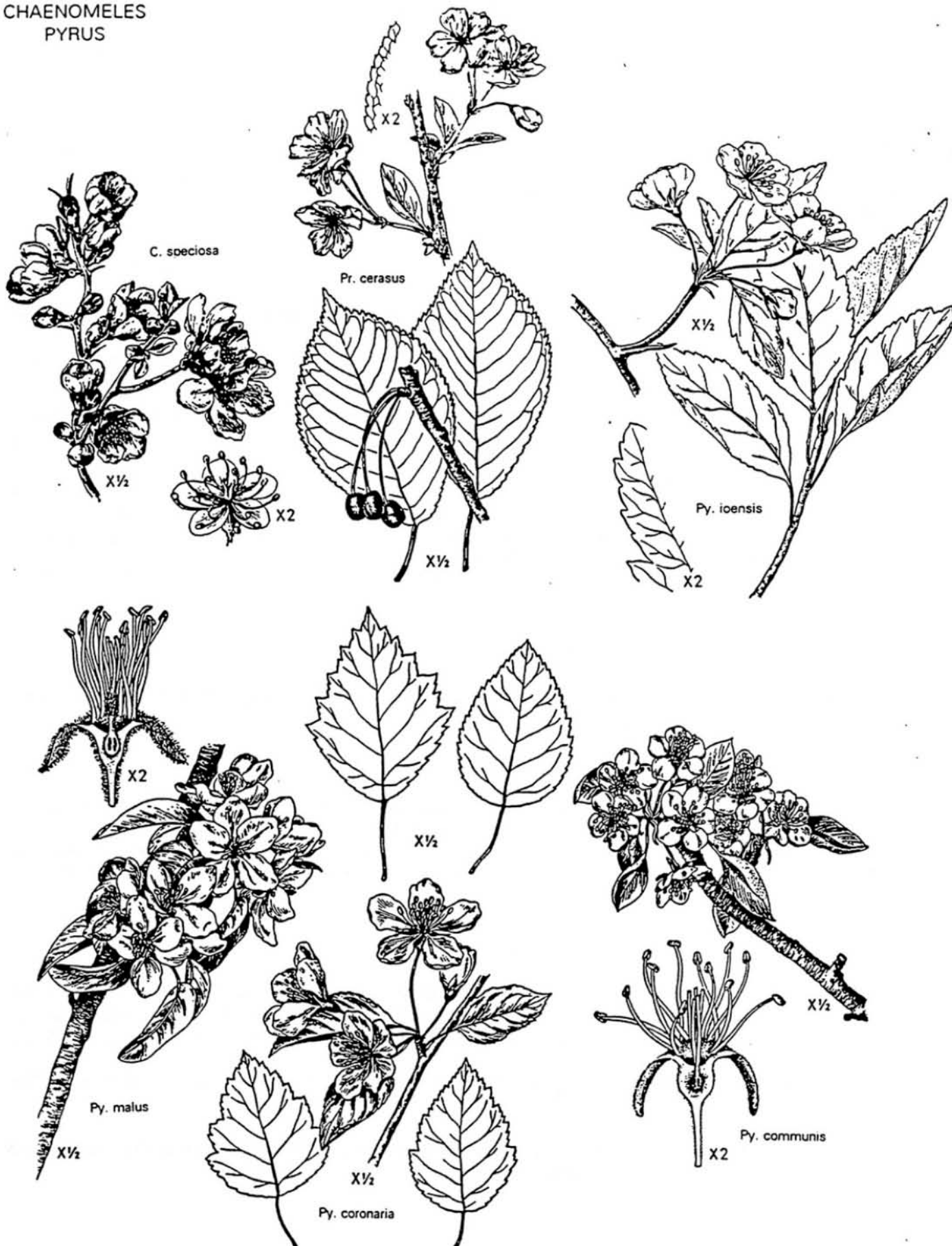
## 18. PYRUS L.

Trees and shrubs, sometimes with branches ending in thorns; leaves simple, alternate; glands of midvein of leaf sometimes absent; flowers 2 cm wide or more; hypanthium united with carpels to or almost to summit of ovaries; sepals and petals 5; stamens 15 or more; carpels 2-5, united; styles as many; fruit a pome, large. (*Malus* Mill., Apple)

Other cultivated species are *Pyrus amygdaliformis* Vill., *P. ioensis* (A.W.Wood) L.H.Bailey, and *P. betulaefolia* Bge. (*P. calleryana* Decne., Callery Pear).

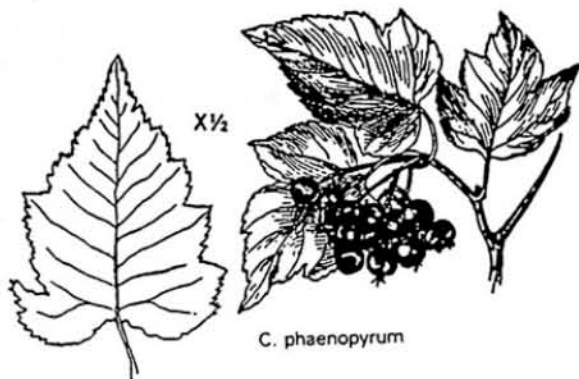
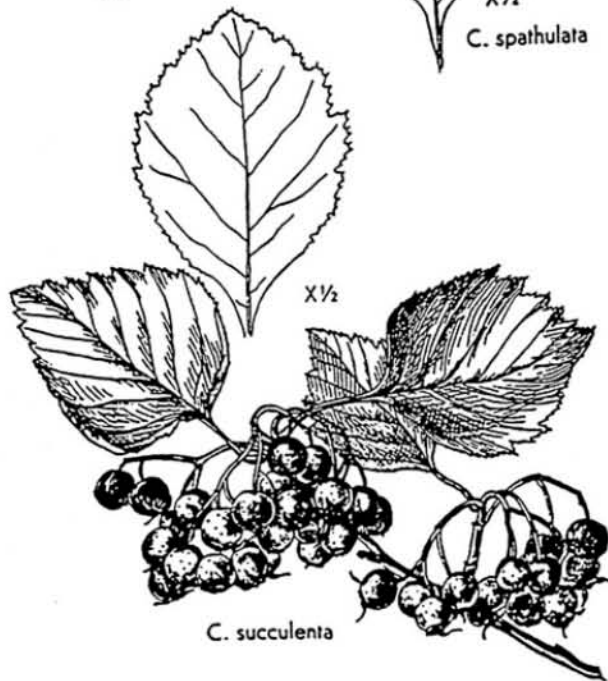
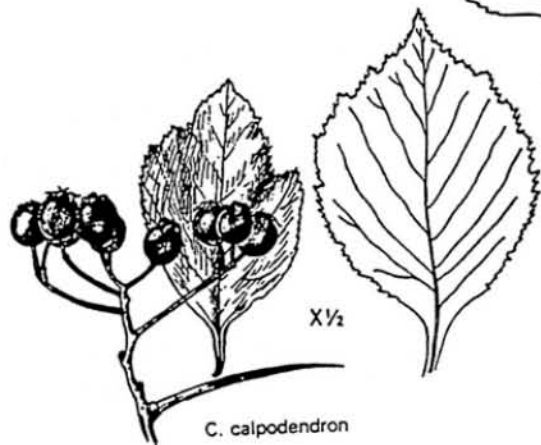
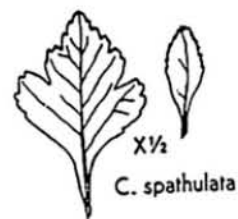
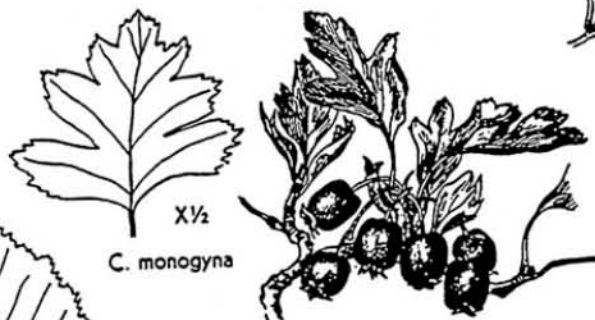
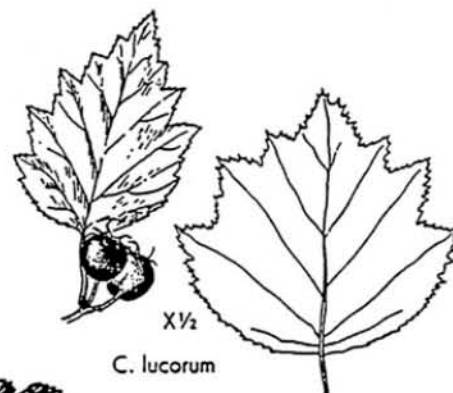
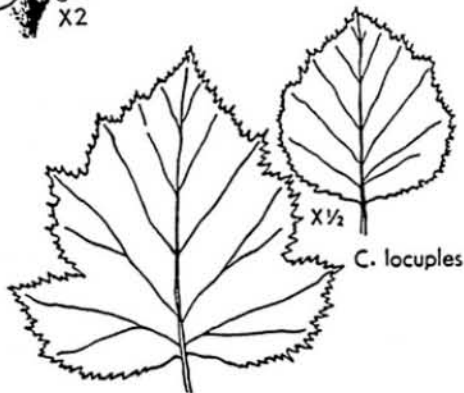
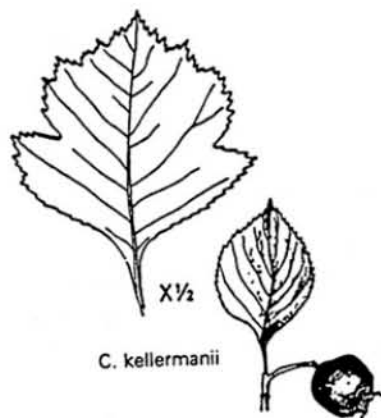
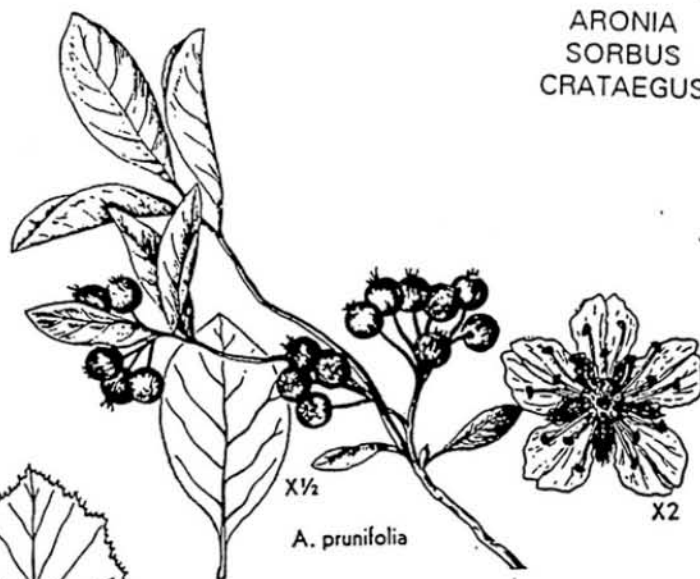
a Mouth of hypanthium closed around styles; styles separate to base; fruit with grit cells; petals white; blades finely serrate, glabrous at maturity. 1. *P. communis*

PRUNUS  
CHAENOMELES  
PYRUS





ARONIA  
SORBUS  
CRATAEGUS



- a' Mouth of hypanthium open; styles united at base; fruit without grit cells; petals pink or white; blades sometimes lobed.
- b Young branches, petioles, pedicels, lower leaf-surface, and calyx pubescent; anthers yellow; blades usually crenate-serrate. 2. *P. malus*
- b' Young branches, petioles, pedicels, and lower leaf-surface glabrous or glabrate; calyx glabrous or pubescent; blades ovate, serrate or lobed, mostly acute. 3. *P. coronaria*

1. \**Pyrus communis* L.

Pear

Adventive (Eurasian cultigen)

Tree or tree-like; leaves simple, elliptic to subrotund, finely serrate, glabrous at maturity; hypanthium mouth surrounding the separate styles; flowers white, more than 2 cm wide; styles free to base; anthers red; fruit pyriform to obovoid, containing stone cells.

HERBARIUM RECORDS: May 1888—Cols., Craig; 13 Aug 1898—Cols., W. Kellerman; 5 Apr 1986—W. Hudson St. at entrance to Tuttle Park, Cols., Cooperband 11.

NOTE: See Braun 1961:165.

2. \**Pyrus malus* L.

Apple

Persisting after Cultivated (Eurasian cultigen)

Tree; leaves simple, elliptic to ovate, finely serrate, permanently pubescent beneath; flowers white, tinged with pink, 3 cm wide; hypanthium densely tomentose, open at the mouth; styles united at base; anthers yellow; fruit ovoid-globose, without stone-cells, calyx persistent.

REFERENCE: Craig 1890:78 (seems to be naturalized in the woods, 18 Apr 1882, 1 May 1883, 5 May 1884, 10 May 1885, 24 Apr 1887, 2 May 1888).

HERBARIUM RECORDS: Spring 1889—Cols., Craig; 3 May 1901—Cols., Mead; 18 May 1911—Westerville, Hanawalt.

NOTE: See Braun 1961:165.

3. *Pyrus coronaria* L. var. *coronaria*

Wild Crab, Crab-apple, Sweet Crab

Tall shrub or low tree, branches thorny; leaf-blades ovate, serrate or lobed, mostly acute, lower surface glabrous or glabrate; mouth of the hypanthium open; flowers exceedingly fragrant; calyx glabrous or pubescent; petals at first pink, fading white; anthers pink or salmon-color; styles united at base; fruit subglobose, greenish.

REFERENCES: Riddell 1834:118; Sullivant 1840:18; Selby & Craig 1890:9; Braun 1961:166 (illus. p. 162; best to consider *Pyrus coronaria* a polymorphic species and not segregate vars., var. *dasycalyx*, sometimes regarded as a hybrid between *Pyrus coronaria* and the more western *Pyrus ioensis*, is found in Franklin Co.).

HERBARIUM RECORDS: 1840—Cols., Sullivant; 1890—Central College, Cols., Selby; 8 Oct 1955—Karl Rd., 300 feet S of Rt. 161, E. Herrick.

The following hybrid is recognized:

*Pyrus coronaria* L. × *Pyrus ioensis* (A.W.Wood) L.H.Bailey

Similar to the typical *Pyrus coronaria* except hypanthium is sparingly villous, sepals glabrate, leaves paler beneath.

Syn.: *P. coronaria* L. var. *dasycalyx* (Rehder) Fernald

REFERENCE: Braun 1961:166 (*Pyrus coronaria* L. var. *dasycalyx*, sometimes regarded as a hybrid between *Pyrus coronaria* and the more western *Pyrus ioensis* (A.W.Wood) L.H.Bailey is found in Franklin Co.).

HERBARIUM RECORDS: 29 Apr 1899—Franklin Co., Fullmer; 6 May 1899—Franklin Co., Fullmer; 18 Apr 1991—Antrim Park, near underpass entrance, just W of Rt. 315, near parking lot, N of Bethel Rd., Sharon Twp., Lowden 4594.

## 19. ARONIA Medik. Chokeberry

Shrubs, without thorns; leaves simple, alternate, glandular-serrate, a row of slender toothlike glands on upper side of midvein of leaf; flowers white, in rounded or flattened clusters; sepals and petals 5; stamens usually 20. (often incl. along with *Sorbus*, in the closely allied genus *Pyrus*)

1. *Aronia prunifolia* (Marshall) Rehder

Choke-berry, Red Chokeberry

Shrub, without thorns; leaves simple with a row of slender toothlike glands on upper side along midvein; inflorescence and lower leaf-surface pubescent; fruit dark purple, 1 cm or less wide. Syn.: *Pyrus floribunda* Lindl.

REFERENCES: Sullivant 1840:18 (*Pyrus arbutifolia* L.); Selby & Craig 1890:9 (*Pyrus arbutifolia* L.f.).

HERBARIUM RECORDS: 1840—Cols., Sullivant; 17 Jul 1971—W of Olentangy River Rd., approx. ½ mi. N of Henderson Rd., tree approx. 15 feet high & 5 inches DBH on hilltop, crown wide and low, Clinton Twp., Roberts 1352.

NOTE: Cronquist (p. 263) cites *Aronia prunifolia* & *Aronia arbutifolia* (L.) Elliott separately. Sullivant (1840) and Selby & Craig (1890) misapplied the name *Pyrus arbutifolia*. Not mapped for Franklin Co. by Braun 1961:167 (illus. p. 168).

## 20. SORBUS L. Mountain-ash

Trees or shrubs; leaves pinnately compound; twigs, pedicels, and lower surface of leaf-blades white pubescent; winter buds not glutinous; flowers about 1 cm wide, white, in dense compound clusters; stamens 15-20; styles separate; fruit about 1 cm wide, orange-red. (often incl. in *Pyrus*)

### 1. \**Sorbus aucuparia* L.

European Mountain-ash, Rowan-tree

Cultivated (native of Europe)

Tree; leaves pinnately compound; lower surface of leaflets, branches of inflorescence and hypanthium more or less white pubescent; fruit about 1 cm wide. Syn.: *Pyrus aucuparia* (L.) Gaertn.

HERBARIUM RECORDS: 1897—OSU Campus, *Ruppersberg*; 2 Aug 1967—OSU, beside Orton Hall, Cols., *Cooke*.

NOTE: See Braun 1961:169 (illus. p. 168).

## 21. CRATAEGUS L. Hawthorn

Shrubs and small trees; leaves simple, blades serrate or lobed; axillary thorns usually present; flowers epigynous, in corymbs; petals and sepals 5; stamens 5-many; carpels bony, nutlets 2-5, united, or rarely 1; fruit a pome. Leafy flowering and fruiting branchlets are necessary for making positive determinations.

†*Crataegus delecta* Sarg. was reported for Franklin Co. by Jones 1943:92. I have not been able to place this name with any of the recognized species found in Franklin Co.

Names believed to apply to plants of hybrid origin are listed here before the key to accepted species.

### †*Crataegus* × *kellermanii* Sarg.

(*C. pruinosa* × *C. punctata*)

REFERENCE: Braun 1961:182 (illus. p. 177, probably a hybrid between *Crataegus punctata* and *Crataegus pruinosa* or a related species).

NOTE: No specimens seen from Franklin Co. Roberts & Cooperrider (1982) put under *Crataegus punctata*.

### *Crataegus* × *locuples* Sarg.

(*Crataegus mollis* × *Crataegus pruinosa*)

REFERENCE: Braun 1961:194 (illus. p. 184, possibly a hybrid between *Crataegus pruinosa* or a related species and *Crataegus mollis*).

NOTE: No specimens seen from Franklin Co. Roberts & Cooperrider (1982) put *Crataegus locuples* under *Crataegus pruinosa*.

### *Crataegus* × *lucorum* Sarg.

(*Crataegus coccinea* × *Crataegus flabellata*)

REFERENCE: Braun 1961:187.

HERBARIUM RECORD: 15 May 1901—Worthington, *Mead*.

NOTE: Roberts & Cooperrider (1982) put *Crataegus lucorum* under *Crataegus flabellata*, which perhaps fits best the above cited specimen.

### *Crataegus* × *mansfieldensis* Sarg.

(*Crataegus coccinea* × *Crataegus punctata*)

REFERENCE: Braun 1961:182 (of doubtful relationship and perhaps a hybrid between some species of the Punctatae and of the Coccineae series).

NOTE: No specimens seen from Franklin Co. Roberts & Cooperrider (1982) put *Crataegus mansfieldensis* under *Crataegus punctata*.

### *Crataegus* × *persimilis* Sarg.

(*Crataegus crus-galli* × *Crataegus succulenta*)

REFERENCE: Braun 1961:178 (possibly a hybrid between *Crataegus crus-galli* & *C. succulenta* or a similar species).

HERBARIUM RECORD: 5 Oct ca. 1901—Cols., *W. Kellerman*.

NOTE: Roberts & Cooperrider (1982) put *Crataegus persimilis* under *Crataegus crus-galli*. Perhaps the above specimen with just 10 stamens (not 20) belongs best under *Crataegus crus-galli*.

a Veins of the leaves running to the sinuses as well as to the points of the lobes; leaves mostly ovate or deltoid, distinctly lobed.

b Style and nutlets 3-5.

c Leaves acute or acuminate, often cordate at base, 2-5 cm wide; calyx somewhat deciduous from fruit.

1. *C. phaenopyrum*

- c' Leaves rounded to acutish at tip, not cordate at base, less than 2 cm wide; calyx persistent on fruit.  
2. *C. spathulata*
- b' Style and nutlet 1, rarely 2 or 3. 3. *C. monogyna*
- a' Veins of the leaves running only to the points of lobes or larger teeth; leaves entire or variously lobed.
- d Nutlets 2-3, rounded on ends, deeply pitted on the inner side.
  - e Foliage and inflorescence glabrous or sparsely pubescent; leaves subcoriaceous; young branchlets glabrous or slightly villous. 4. *C. succulenta*
  - e' Foliage and inflorescence distinctly pubescent; leaves thin; young branchlets villous or tomentose.  
5. *C. calpodendron*
- d' Nutlets not pitted on the inner side.
- f Floral leaves mostly narrowed to an acute or acutish to attenuate base.
  - g Floral leaves lobeless or nearly so, mostly obovate to oblong-elliptic.
    - h Leaves glossy above; leaves, twigs and inflorescence glabrous; nutlets usually 1 or 2; fruits hard and dry. 6. *C. crus-galli*
    - h' Leaves dull above, with impressed veins; nutlets 3-5; fruit mellow or succulent. 7. *C. punctata*
  - g' Floral leaves usually lobed, mostly elliptic or rhombic-ovate or rarely obovate.
    - i Petiole and base of blade conspicuously glandular; fruit green or yellow to orange or red, hard and dry. 8. *C. intricata*
    - i' Petiole and blade eglandular or nearly so; fruit dark or bright red, rarely yellow, mellow or succulent. 9. *C. chrysocarpa*
- f' Floral leaves mostly broad at the rounded or truncate base, usually lobed or incised.
  - j Plants strongly pubescent; fruits hairy on ends; leaves hairy beneath at least along the veins; filaments much shorter than the petals. 10. *C. mollis*
  - j' Plants less pubescent or glabrous; fruit and leaves glabrous; filaments nearly as long as the petals.
  - k Sepals usually deeply glandular-serrate. 11. *C. coccinea*
  - k' Sepals entire or slightly glandular-serrate.
    - l Fruiting calyx prominent and usually elevated; young leaves usually glabrous. 12. *C. pruinosa*
    - l' Fruiting calyx small and closely sessile; young leaves with short hairs above. 13. *C. flabellata*

1. \*†*Crataegus phaenopyrum* (L.f.) Medik.

Washington-thorn

Cultivated (native to E U.S.)

Tree; leaves mostly ovate, acute or acuminate, often cordate at base, the veins running to the sinuses as well as to the points of the lobes; styles 4 (3-5).

HERBARIUM RECORDS: 7 Jun 1967—OSU Campus, cult., Cols., *Cooke & Stuckey*; 10 Jul 1982—OSU Campus, along 11th Ave. at Morrison Tower, cult., Cols., *T. Lammers*.

NOTE: Not mapped for Franklin Co. by Braun 1961:174 (illus. p. 177).

2. *Crataegus spathulata* Michx.

Littlehip Hawthorn

Status?

REFERENCE: Riddell 1834:118.

NOTE: No specimens seen from Franklin Co. Not cited by Braun (1961).

3. \**Crataegus monogyna* Jacq.

One Seed Hawthorn

Cultivated (native of Europe & W Asia)

Small tree or arborescent shrub; branches usually armed with short stout thorns; leaves ovate to obovate, cuneate to truncate at base; blades deeply cleft with 3-5 lobes, veins running to the sinuses as well as to the points of the lobes.

Syn.: *C. oxyacantha* L., a rejected name

REFERENCES: Riddell 1834:118 (*Crataegus apiifolia*); Selby & Craig 1890:9 (introduced).

HERBARIUM RECORDS: 4 Aug 1892—near Cols., *Selby*; 31 Oct 1901—Cols., *W. Kellerman*; 31 Oct 1901—OSU, between Orton & Zoology Halls, Cols., *W. Kellerman*; 10 May 1967—OSU, S side of Taylor Tower, Cols., *Cooke & Stuckey*.

NOTE: Not mentioned for Franklin Co. by Braun 1961:176.

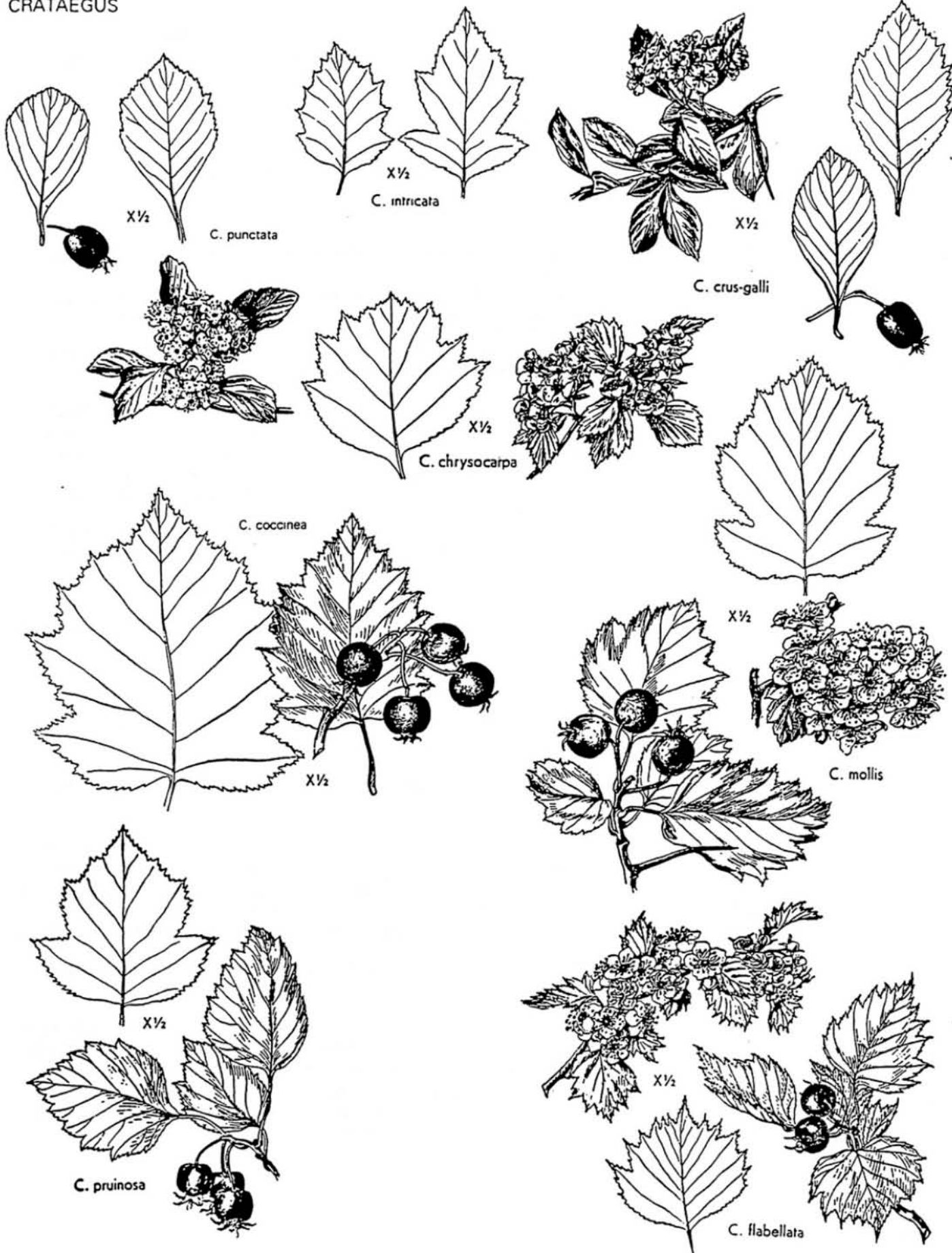
4. *Crataegus succulenta* Schrad.

Fleshy Hawthorn

Tree or sometimes arborescent shrub, young twigs glabrous; veins of leaves running only to the points of the lobes or larger teeth, sepals glandular-serrate; nutlets 2-4, rounded at the ends, with a deep pit on the inner side.

REFERENCE: Braun 1961:197 (illus. p. 196).

CRATAEGUS



HERBARIUM RECORDS: 13 Jul 1894—Big Darby Creek, *W. Kellerman*; 16 May 1895—Olentangy R., *Osburn*; 13 Jul 1904—Franklin Co., *W. Kellerman*.

5. *Crataegus calpodendron* (Ehrh.) Medik. Black Thorn, Pear-hawthorn

Arborescent shrub or sometimes a small tree; twigs villous or tomentose when young; veins of leaves running only to the points of the larger teeth; blades usually short-villous above and sometimes beneath. Syn.: *C. tomentosa* L.  
REFERENCES: Craig 1890:78 (of the three trees on the grounds belonging to this genus two are probably this species; one is found in the E part of the woods, and another along the river S of the brook; the other is perhaps *Crataegus punctata* Jacq.); Selby & Craig 1890:9; Braun 1961:198 (illus. p. 196).

HERBARIUM RECORDS: [date?]-near Cols., *Selby*; 9 Jun [yr.?]-Worthington, [coll.?]; Spring 1889—Cols., *Craig*; May 1892—Cols., *Werner*; 1897—Neal's [Neil's] Run, *Ruppersberg 116*; May 1901—Worthington, *T[ylor]*; 22 Sep 1901—1 mi. NE of Alton, *Jennings*.

NOTE: Maybe Riddell 1834:118 (*Crataegus pyrifolia*) belongs here.

6. *Crataegus crus-galli* L. Cockspur-thorn

Arborescent shrub or tree; twigs and leaves glabrous; blades narrowly obovate to elliptic, acutish to attenuate at base, glossy and dark green above. Syn.: *C. ohioensis* Sarg.

REFERENCES: Riddell 1834:118; Sullivant 1840:18; Selby & Craig 1890:9; Sargent 1922:183-184 (*Crataegus ohioensis* Sarg.; Type locality, roadsides near Cols., *R. E. Horsey & J. H. Schaffner*); Braun 1961:176 (illus. pp. 175 & 177, *Crataegus crus-galli* L.); Braun 1961:178 (*Crataegus ohioensis* Sarg., is known only from the type locality in Franklin Co., it is probably of hybrid origin).

HERBARIUM RECORDS: 1890—Jones' Mill, Cols., *Selby*; 7 Sep 1890—Lake Park, near Cols., *Selby*; 28 May 1892—Central College, *W. Kellerman*; May 1892—Central College, *Detmers*; May 1901—Cols., *W. Kellerman*; 31 Oct 1901—Cols., *W. Kellerman*.

7. *Crataegus punctata* Jacq. Dotted Hawthorn

Arborescent shrub or small tree; floral leaves thick and firm, dull above; blades lobeless or nearly so, obovate to oblong, glabrous or short-hairy on one or both sides, attenuate at base. Syn.: *C. × disperma* Ashe, *C. peoriensis* Sarg.  
REFERENCES: Riddell 1834:118; Sullivant 1840:18; Craig 1890:79 (this tree is situated in the N part of the woods, near Woodruff Ave., 25 May 1883, 1 Jun 1884, 16 May 1885, 12 May 1888); Selby & Craig 1890:9; Braun 1961:180 (illus. pp. 175 & 177; *Crataegus punctata*; *Crataegus peoriensis*; *Crataegus × disperma*, intermediate between *Crataegus crus-galli* & *Crataegus punctata*).

HERBARIUM RECORDS: 21 May 1891—Cols., *Werner*; 11 Aug 1895—Cols., [*W. Kellerman*]; 19 May 1896—W Cols., *M. Wright*; 12 Aug 1897—Rocky Fork, *W. Kellerman*; 7 Sep 1898—Sharon Twp., *W. Kellerman*; 7 Sep 1899—Worthington, *Selby*; 24 May 1901—43 E. Ninth Ave., Cols., *T[ylor]* (MU, OS); Oct 1903—Franklin Co., *W. Kellerman 197* (MU).

NOTE: Roberts & Cooperrider (1982) put *Crataegus × disperma* Ashe (*C. crus-galli* × *C. punctata*) under *Crataegus punctata*.

8. *Crataegus intricata* Lange Biltmore-hawthorn

REFERENCE: Braun 1961:183 (illus. p. 177).

NOTE: No specimens seen from Franklin Co.

9. †*Crataegus chrysocarpa* Ashe Fireberry Hawthorn

Arborescent shrub or small tree; floral leaves usually lobed, narrowed to an acute base; blades rhombic-ovate, rounded to obtuse or acutish at the tip. Syn.: *C. margaretta* Ashe, *C. rotundifolia* Moench

REFERENCE: Braun 1961:185 (illus. pp. 175 & 184, *Crataegus margaretta*).

HERBARIUM RECORDS: 22 May ca. 1900—Big Darby, Cols., *W. Kellerman*; 8 Sep 1901—Cols., [coll.?]; 22 May 1902 or 1903—Big Darby, *W. Kellerman* (MU); 14 May 1903—Cols., *W. Kellerman 193* (MU, OS).

10. *Crataegus mollis* (Torr. & A.Gray) Scheele Downy Hawthorn

Tree, relatively strongly pubescent; leaves broad at truncate base, margin lobed or incised; joining blades densely short-hairy above and tomentose beneath; flowers in tomentose compound cymes; sepals coarsely glandular-serrate, tomentose on both sides; fruit hairy at least near the ends; filaments much shorter than the petals.

REFERENCES: Werner 1893:93 (near Insane Asylum, Cols., *Ramsey & Neiswender*, students in preparatory class in botany OSU, spring 1893); Braun 1961:197 (illus. pp. 175 & 196).

HERBARIUM RECORDS: 4 May 1895—Georgesville, *W. Kellerman*; 10 Sep 1901—Cols., *W. Kellerman 42* (MU, OS); 10 May 1903—Big Darby, *W. Kellerman*.

11. *Crataegus coccinea* L. Scarlet Hawthorn

Arborescent shrub or tree; leaves glabrous or short-hairy above when young, broad-based, ovate to suborbicular, with usually 3-5 lateral lobes; flowers less than 2 cm wide, in glabrous or villous compound cymes; sepals glandular-serrate. Syn.: *C. pedicellata* Sarg., *C. pennsylvanica* Ashe, *C. putnamiana* Sarg.

REFERENCES: Riddell 1834:118; Sullivant 1840:18; Selby & Craig 1890:9; Braun 1961:195 (illus. p. 196, *Crataegus pedicellata* Sarg.); Braun 1961:195 (*Crataegus pennsylvanica* Ashe); Braun 1961:195 (illus. p. 196, *Crataegus putnamiana* Sarg.).

HERBARIUM RECORDS: May 1890—Cols., *Werner*, 28 Jun 1892—Worthington Woods, *W. Kellerman*; 31 Aug 1896—Dublin, *W. Kellerman*; 15 May 1901—Cols., *W. Kellerman* 9 (MU); 5 Sep 1901—Cols., *W. Kellerman* 115 (MU, OS); 2 Oct 1901—Cols., *W. Kellerman* 39 (MU, OS); [date?]-Franklin Co., *Jennings & Tyler*.

NOTE: Roberts & Cooperrider (1982) put *Crataegus persimilis* under *Crataegus crus-galli*.

12. *Crataegus pruinosa* (H.L.Wendl.) K.Koch

Frosted Hawthorn

Tree or arborescent shrub; young leaves usually glabrous; blades rounded to truncate at base; veins running only to points of larger teeth; fruiting calyx prominent and usually elevated. Syn.: *C. compacta* Sarg., *C. franklinensis* Sarg., *C. gattingeri* Ashe, *C. jesupii* Sarg., *C. mackenzii* Sarg. var. *bracteata* (Sarg.) Palmer

REFERENCES: Sargent 1923:100 (*Crataegus franklinensis* Sarg.; Type locality, N of Cols. between Flint & Glenmary, *R. E. Horsey*); Braun 1961:190 (illus. pp. 175 & 184, *Crataegus mackenzii* var. *bracteata*); Braun 1961:190 (illus. pp. 175 & 184, *Crataegus pruinosa*); Braun 1961:192 (*Crataegus compacta*); Braun 1961:192 (*Crataegus franklinensis*); Braun 1961:192 (illus. p. 184, *Crataegus gattingeri*); Braun 1961:192 (*Crataegus jesupi*).

HERBARIUM RECORDS: 19 May 1901—E side of Scioto R., 3 or 4 mi. S of Dublin, *W. Kellerman* 77 (MU); 19 May 1901—Dublin, *Jennings*; 5 Oct 1901—Cols., *W. Kellerman* (MU, OS); 8 Oct 1901—Cols., *W. Kellerman*; 15 May & 14 Nov 1903—Franklin Co., *W. Kellerman*.

NOTE: Roberts & Cooperrider (1982) put *Crataegus locuples* under *Crataegus pruinosa*.

13. †*Crataegus flabellata* (Bosc) K.Koch

Fanleaf Hawthorn

Arborescent shrub or small tree; twigs glabrous; leaves broadly ovate to deltoid, rounded or truncate at base, usually with shallow lateral lobes; sepals narrow, generally entire. Syn.: *C. gravis* Ashe, *C. macrosperma* Ashe, *C. populnea* Ashe

REFERENCES: Braun 1961:186 (illus. p. 184, *Crataegus macrosperma* Ashe); Braun 1961:188 (illus. p. 184, *Crataegus gravis* Ashe); Braun 1961:188 (illus. p. 184, *Crataegus populnea* Ashe).

HERBARIUM RECORDS: 19 Sep 1901—Cols., *W. Kellerman*; 14 May & 3 Nov 1903—Cols., *W. Kellerman*.

NOTE: Roberts & Cooperrider (1982) put *Crataegus lucorum* also under *Crataegus flabellata*.

22. AMELANCHIER Medik. Juneberry, Shadbush

Shrubs and small trees; leaves alternate, simple, blades pinnately veined, serrate; flowers in short racemes at end of leafy branches of current season, appearing with young leaves; sepals 5; petals 5, white or pink; stamens usually 20; carpels 5, united; styles 5, united below; locules 5, 2 ovules in each; later, by false septation, locules 10, 1 ovule in each; fruit a small pome.

Specimens have not been located for the New England Serviceberry or Rock Serviceberry (†*Amelanchier sanguinea* (Pursh) DC.) that might substantiate the reports made by Braun 1961:172 (illus. p. 171), McCance 1984:A-218, and ODNR-DNAP 1988-1989:11.

- a Summit of ovary pubescent; blades rounded at base, lower 1/3-1/2 of margin sometimes entire.
  - b Blades oblong; petals narrow; raceme loose; lateral veins relatively straight and ending in teeth. *A. sanguinea* (Pursh) DC.
  - b' Blades ovate-oblong; petals about half as wide as long; raceme dense; lateral veins upcurving and anastomosing. 1. *A. spicata*
- a' Summit of ovary glabrous; blades ovate to obovate, acute to acuminate, finely serrate nearly to the rounded or cordate base.
  - c Blades at anthesis small and white-pubescent beneath, glabrous or nearly so at maturity; pedicels sometimes pubescent. 2. *A. arborea*
  - c' Blades at anthesis half grown, glabrous or nearly so, red, purple, or bronze; pedicels glabrous. *A. laevis* Wiegand

1. †*Amelanchier spicata* (Lam.) K.Koch

Dwarf Serviceberry

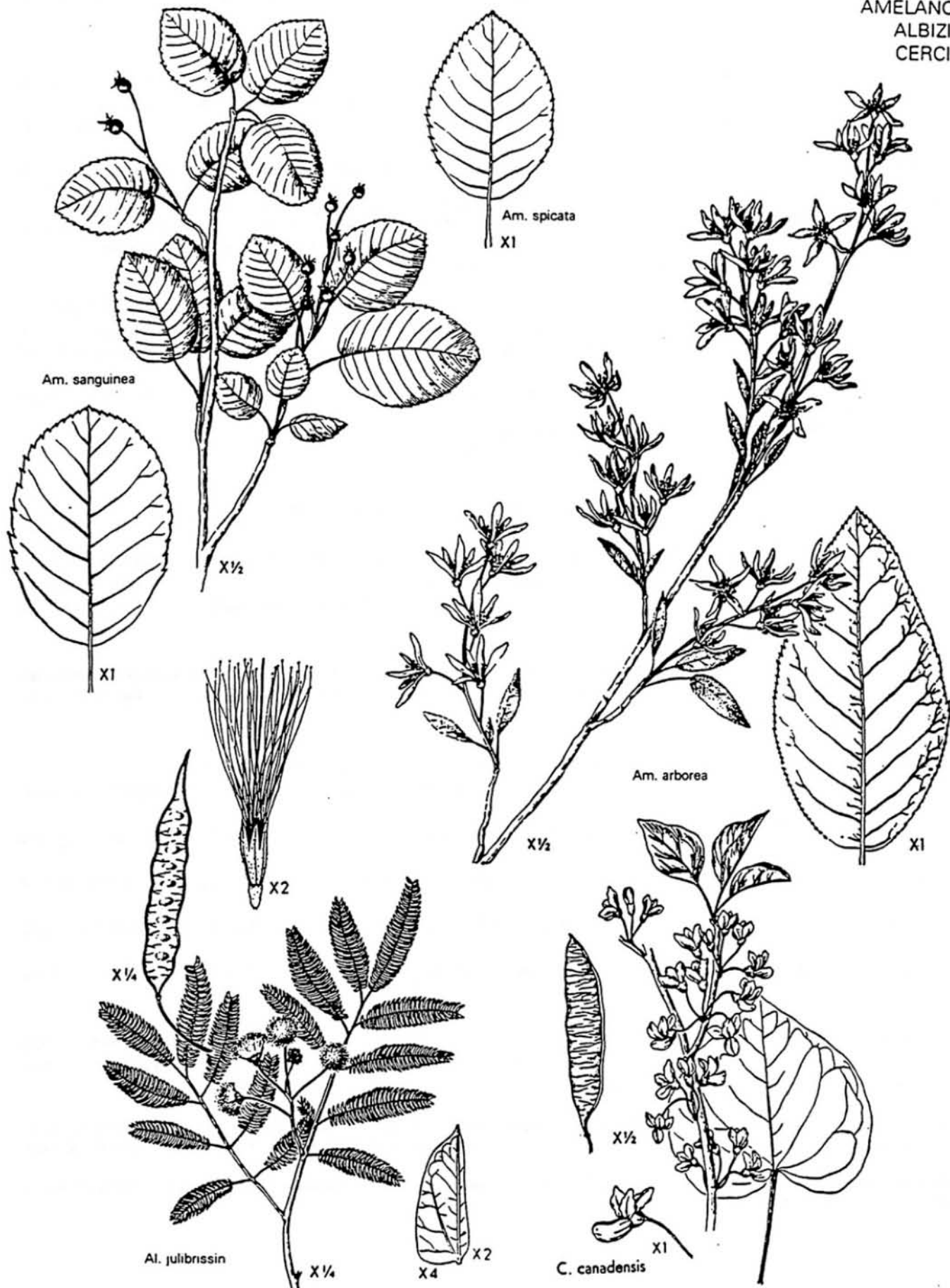
Stoloniferous shrub; leaf blades ovate-oblong with lateral veins upcurving and anastomosing, teeth more than twice as many as the lateral veins; summit of ovary pubescent.

REFERENCE: Braun 1961:172 (illus. p. 171).

HERBARIUM RECORDS: 9 May 1891—toward Big Darby in damp low woods, Cols., *Selby*; 1 May 1892—Georgesville, *Werner* (CLM); 24 Sep 1892—Georgesville, *Werner* (CLM); 22 May 1903—Big Darby, *W. Kellerman*; 20 Apr 1991—bluffs SE corner of jct. Rt. 665 & Graessle Rd., Pleasant Twp., Harrisburg Quad., *McCormac* 3465.

NOTE: Maybe references of Sullivant 1840:18 (*Aronia alnifolia* Nutt.), Selby & Craig 1890:9 (*Amelanchier alnifolia* Nutt.) and Selby 1891a:111a (#208? Re-collected) apply here.

AMELANCHIER  
ALBIZIA.  
CERCIS





**2. *Amelanchier arborea* (F.Michx.) Fernald**

Downy Serviceberry, Juneberry, Shadbush

Tall erect shrub or slender tree; leaves oblong-obovate, much less than half-grown at anthesis, densely pubescent beneath when young, not coppery; summit of the ovary glabrous. Syn.: *A. canadensis* Torr. & A.Gray, *A. canadensis* var. *botryapium* (L.f.) Torr. & A.Gray

REFERENCES: Riddell 1834:118 (*Aronia botryapium*); Sullivant 1840:18 (*Amelanchier botryapium* Lindl.); Craig 1890:79 (there is but one specimen on the grounds, a small tree standing on the campus N of the botanical bldg., 14 Apr 1882, 28 Apr 1883, 30 Apr 1884, 24 Apr 1885, 19 Apr 1886, 25 Apr 1887, 27 Apr 1888); Selby & Craig 1890:9; Kellerman & Werner 1893:227; Werner 1893:93 (Georgesville 1891, Selby); Braun 1961:170 (illus. pp. 168 & 171).

HERBARIUM RECORDS: 22 Apr & 6 May 1899—Franklin Co., Fullmer; 3 May 1911—2½ mi. E of Westerville, open woods, Hanawalt; 25 Apr 1925—Big Walnut Creek, Westerville, wooded hillsides, Camp; 15 Jun 1925—Flint, R. Crane (OWU); 8 Apr 1967—OSU, Drackett Tower, cult., Cols., Stuckey & Cooke; 22 Apr 1982—Highbanks Metro Park (Franklin & Delaware Cos.), bluff face, G. Moore 268 & 269; 13 Jul 1982—Highbanks Metro Park (Franklin & Delaware Cos.), bluff face, Brauning 267; 26 Aug 1982 (sterile)—Highbanks Metro Park (Franklin & Delaware Cos.), bluff face, G. Moore 270; 5 Apr 1986—Highbanks Metro Park (Delaware Co.), tops of bluffs & ravines E of Olentangy R., Witsberger; 17 Jun 1986 (sterile)—Highbanks Metro Park, woods, Kosko; 17 Apr 1988—OSU Campus, planted N side of Howlett Hall, Gerberick 8; 20 Apr 1992—Camp May Orton (Godman Guild), N of Worthington, W of Rt. 23, Sharon Twp., Lowden 4918.

The following hybrid is recognized:

***Amelanchier arborea* × *Amelanchier laevis***

Leaves at anthesis lesser pubescent, with a prominent coppery-red cast.

HERBARIUM RECORDS: 18 Apr 1991—Hoover Dam Park, woods W of entrance off Cubbage Rd., Blendon Twp., Lowden 4589; 19 Apr 1992—Overbrook Drive Ravine, between N. High St. & E. Cooke Rd., Clinton Twp., Lowden 4914.

NOTE: See Braun 1961:172.

## MIMOSACEAE, Mimosa Family

Tree or shrub; flowers in peduncled heads; corolla regular; leaves bipinnate; filaments conspicuous, distinct or connate below, colored and exserted. (Leguminosae-Mimosoideae)

### 1. ALBIZIA Durazz.

Calyx 5-toothed; corolla funnelform, deeply 5-lobed; stamens numerous, long-exserted, filaments connate below.

**1. \**Albizia julibrissin* Durazz.**

"Mimosa," Silk-tree

Cultivated (native of tropical Asia)

Tree to 10 m high; leaves twice pinnately compound; pinnae numerous, in pairs; flowers pink, in long-peduncled lobular heads, calyx 2-3 mm long; petals approx. 7 mm long; fruits a broad flat legume.

HERBARIUM RECORD: 6 Jul 1967—OSU, courtyard behind Math. Hall, cult., Cols., Cooke.

NOTE: See Braun 1961:223.

## CAESALPINIACEAE, Caesalpinia Family

Trees and herbs; stems with or without thorns; leaves alternate, pinnate or bipinnate compound, seldom simple; flowers in small clusters, racemes or panicles, perfect or sometimes unisexual; corolla regular, petals united or separate; or corolla somewhat zygomorphic, petals separate below, odd petal enclosed by the others in bud, not papilionaceous. (Leguminosae-Caesalpinioideae)

**a Trees.**

**b** Leaves simple, ovate-cordate, entire; flowers bisporangiate, pink- or red-purple, in small clusters along branches of previous years. **1. CERCIS**

**b'** Leaves compound, even-pinnate; petals greenish-yellow or -white; flowers monosporangiate or some bisporangiate, in racemes or panicles.

**c** Flowers in slender racemes; hypanthium cup-shaped; early leaves pinnate, later ones bipinnate; with or without thorns. **2. GLEDITSIA**

**c'** Flowers in panicles; hypanthium tubular; leaflets (except 2-4 basal ones) again compound; thorns absent. **3. GYMNOCLADUS**

**a' Herbs.**