

- a' Flowers erect; corolla white or greenish, 6 mm long or less, lobes ascending; calyx as long as corolla-tube; inflorescence overtopped by sterile lateral branches below it.
- b Stem-leaves, except sometimes the lowest, petioled. 2. *A. cannabinum*
- b' Stem-leaves sessile or nearly so. 3. *A. sibiricum*

1. *Apocynum androsaemifolium* L.

Spreading Dogbane

Plants erect; leaves opposite, petioles distinct; calyx lobes about 1/4-1/3 the length of corolla tube; corolla usually more than 6 mm long, pinkish, stripes deeper pink in tube; flowers nodding.

REFERENCES: Riddell 1834:156; Sullivant 1840:40; Selby & Craig 1890:12; Cooperrider 1995:309 (illus. p. 307).

HERBARIUM RECORDS: 1840—Cols., Sullivant; 1891—Georgesville, Cols., Selby; Jul 1891—Georgesville, Selby; 1 Jul 1891—Georgesville, Werner (CLM); 14 Jul 1893—Scioto R., Selby; 19 May 1896—W Cols., M. Wright; 30 Jun 1925—N Cols., R. Crane (OWU).

2. †*Apocynum cannabinum* L.

Indian-hemp

Plants erect; leaves petiolate; calyx lobes nearly as long as or longer than the corolla tube; corolla greenish-white; seeds 4-6 mm long, coma of seeds 2.5-3 cm long. Incl. var. *cannabinum* and var. *pubescens* (Mitchell ex R.Br.) A.DC.

REFERENCES: Riddell 1834:156 (*Apocynum pubescens* R.Br., dry prairies); Riddell 1835:68 (*Apocynum pubescens* R.Br., Worthington, dry prairies & fields); Sullivant 1840:40; Craig 1890:89-90 (common on the island, where it is quite variable in form; one form approaches closely var. *hypericifolium* (*A. hypericifolium* Aiton), 9 Jul 1882, 17 May 1887, 22 Jun 1889); Selby & Craig 1890:12; Cooperrider 1995:309 (illus. p. 310).

HERBARIUM RECORDS: 1840—Cols., Sullivant; 30 Jul 1883—Olentangy R. near University, Devo; 1888—Cols., Weed (OS, WOOS); Jul 1888—Cols., Craig; 1892—Cols., Bogue; 17 Jun 1895—Cols., W. Kellerman; 19 May 1896—W Cols., M. Wright; 10 Oct 1902—Cols., Sanders; Sep 1931—Cols., J. H. Schaffner; Summer 1938—OSU Botanical Garden, C. Jones; 19 June 1973—quarry 1 mi. S of Dublin, E side of Scioto R. along Rt. 33, Washington Twp., Cahall & Roberts 3593; 5 Jun 1982—Blendon Woods, Owens; 11 Jun 1989—along Highland Dr. RR tracks, W of Olentangy River Rd., Clinton Twp., Lowden 4143; 14 Jun 1989—intersection of Henderson Rd. & Olentangy River Rd., ramp to Rt. 315 going N, Clinton Twp., Lowden 4199; 19 Jul 1989—Antrim Park, Sharon Twp., Lowden 4214; 4 Aug 1989—along Rt. 71 just N of Franklin/Pickaway Co. line, W of Harrisburg, Pleasant Twp., Lowden 4230; 9 Aug 1992—RR tracks between Darby Creek Dr. & Big Darby Creek, Battelle Metro Park, Pleasant Twp., Lowden 5015.

3. †*Apocynum sibiricum* Jacq.

Clasping-leaved Dogbane

Syn.: *A. hypericifolium* Aiton

REFERENCE: Riddell 1834:156 (*Apocynum hypericifolium*, denuded river banks).

NOTE: No specimens seen from Franklin Co. Not mapped for Franklin Co. by Cooperrider 1995:311 (illus. p. 310).

## ASCLEPIADACEAE, Milkweed Family

Herbs; juice usually milky; blades simple, entire; stipules minute; flowers hypogynous, perfect, clustered; sepals 5, separate or united at base; corolla regular, 5-lobed, with a corona; stamens 5, on corolla-base, united in a tube enclosing ovaries, anthers united with stigma, pollen of each pollen-sac a single waxy mass (pollinium), pollinium from left sac of one anther joined by a connective to pollinium from right sac of adjacent anther; carpels 2, ovaries and styles separate, common stigma large, usually 5-lobed or -crenate; fruit an aggregate of 2 follicles, when both ovaries develop; seeds usually comate.

a Stems not twining. 1. ASCLEPIAS

a' Stems twining.

b Corolla white; corona of 5 separate segments, each tipped with 2 awns. 3. AMPELAMUS

b' Corolla purple; corona a disk or cup with wavy or lobed margin.

c Corolla-lobes about 3 mm long. 2. VINCETOXICUM

c' Corolla-lobes 7 mm long or more. 4. MATELEA

### 1. ASCLEPIAS L. Milkweed

Leaves opposite, alternate, or whorled; flowers in umbels; calyx small, corolla larger, usually reflexed at anthesis; corona of 5 hoods, usually conspicuous, often bearing an exerted horn; follicles ovoid or lance-ovoid; seeds comate. (*Acerates* Elliott, incl. *Asclepiodora* A.Gray)

a Hoods without horns.

b Corolla rotate, greenish; hood purplish, with a crest or keel; fruiting pedicels deflexed; leaves mostly alternate.

10. *A. viridis*

- b' Corolla reflexed; hood without a crest or keel within; leaves mostly opposite, lateral veins horizontal.  
11. *A. viridiflora*
- a' An incurved horn within each hood.
  - c Leaves alternate below inflorescence, narrowly lanceolate or oblanceolate; juice not milky; corolla red-orange to yellow. 1. *A. tuberosa*
  - c' Leaves opposite or whorled; juice milky; corolla not as above.
    - d Blades narrowly linear, margins revolute, mostly whorled; petals and hoods white or greenish; horn subulate, much surpassing hood; fruit slender, pedicel erect. 2. *A. verticillata*
    - d' Blades wider than above.
      - e Blades subsessile, base rounded or cordate; lateral veins horizontal; pedicels deflexed in fruit.  
9. *A. sullivantii*
      - e' Blades evidently petioled, rarely cordate at base.
        - f Corolla purple-red, deep purple, or rose-pink; fruit downy or minutely hairy.
          - g Blades lanceolate, lateral veins ascending; corolla deep pink or purple-red; hood 2-3 mm high; fruiting pedicel erect; of low ground. 3. *A. incarnata*
          - g' Blades elliptic to ovate, lateral veins horizontal; corolla dark purple; hood 5-7 mm high, longer than flattened horn; fruiting pedicel deflexed. 6. *A. purpurascens*
        - f' Corolla white, pale pink, dull purple, or greenish.
          - h Leaves most often 8, tapering to apex and base, whorled at middle node, sometimes all opposite; corolla pink; hood white, 3-5 mm long; fruiting pedicels erect. 7. *A. quadrifolia*
          - h' Leaves all opposite; fruiting pedicels deflexed.
            - i Lateral veins of blades horizontal.
              - j Blades densely soft-hairy beneath; corolla pale purple to green; hood with a tooth at each lateral margin; fruit usually with soft conical processes. 5. *A. syriaca*
              - j' Blades glabrous or sparsely hairy beneath; corolla white or pink; hood subglobose, horn flattened, the pointed tip almost horizontal. 8. *A. variegata*
            - i' Lateral veins ascending; blades tapering to base and apex; corolla white or purplish, hood white or pink, 2-toothed. 4. *A. exaltata*

1. *Asclepias tuberosa* L.

Butterfly-weed, Pleurisy-root

Stems rough-hairy, erect, sap watery; leaves mostly alternate, linear-lanceolate, short petiolate; flowers showy; corolla orange to reddish-orange or yellowish-orange; hoods orange; horns present.

REFERENCES: Riddell 1834:156 (dry prairies); Sullivant 1840:40; Selby & Craig 1890:12; Kellerman & Werner 1893:229 (hillside S of Botanical Bldg., Aug 1890); Cooperrider 1995:314 (illus. p. 316).

HERBARIUM RECORDS: 1840—Cols., Sullivant; 1 Jul 1891—Big Darby, Selby (WOOS); 1 Jul 1891—Georgesville, Selby; 1 Jul 1891—Georgesville, Werner (CLM); 3 Oct 1891—Big Darby, Selby; Jul 1892—Georgesville, Bogue; 15 Jul 1897—Cols., Osburn; 18 Aug 1929—near Big Darby Creek S of National Rd., Gordon & Chapman; Summer 1938—OSU Botanical Gardens, C. Jones; 26 Jun 1990—S side of Rt. 71 (mi. 92 mark), just NW of Harrisburg, Pleasant Twp., Lowden 4416; 30 Jul 1992—Rt. 71, mi. 91-92 sign going NE, W of Harrisburg, Pleasant Twp., Lowden 5011.

2. *Asclepias verticillata* L.

Whorled Milkweed, Horsetail Milkweed

Stems erect; leaves linear, 1-2 mm wide, in whorls of 3-6; corolla and hoods greenish-white; horns present.

REFERENCES: Riddell 1834:156 (dry prairies); Cooperrider 1995:321 (illus. p. 322).

HERBARIUM RECORDS: 14 Jun 1955—NE of Worthington, along Penna. RR, Blaydes; 26 Jun 1990—S side of Rt. 71 (92 mi. mark), just NW of Harrisburg, Pleasant Twp., Lowden 4415; 8 Aug 1990—S side of Rt. 71 (92 mi. mark) just NW of Harrisburg, Pleasant Twp., Lowden 4525.

3. *Asclepias incarnata* L. var. *incarnata*

Swamp Milkweed

Stems erect; leaves opposite, petiolate; blades with lateral veins directed apically, diverging from midrib at an acute angle; corolla pink to pinkish-purple, hoods pale pink to whitish; horns present; follicles on ascending pedicels.

REFERENCES: Riddell 1834:156; Sullivant 1840:40; Craig 1890:90 (sparingly along the brook near the lake and NE of the island, 25 Jun 1887); Selby & Craig 1890:12; Cooperrider 1995:315 (illus. p. 318).

HERBARIUM RECORDS: 20 Aug 1882—Olentangy R., Cols., Devoil; Jul 1888—Cols., Craig; 14 Jul 1888—OSU Farm, Cols., Selby; 8 Aug 1890—Franklin Co., Selby; 26 Jul 1891—OSU campus, near Cols., Hine; 11 Jul 1898—Cols., J. H. Schaffner; 28 Sep 1901—1 mi. S of Steelton, Tyler; 10 Oct 1902—Cols., Sanders; 11 Sep 1971—Cols. W of OSU campus along Olentangy R. near Tower Dorms & Battelle, Roberts 2055; 23 Jul 1982—Blendon Woods, Owens; Summer 1988—along Olentangy R., OSU campus, Cols., DeLong; Summer 1988—Galloway Quad. along Big Darby Creek between I-70 & Little Darby Creek, DeLong; 16 Jul 1989—Highbanks Metro Park (Delaware Co.), Morawetz (OS, OWU); 5 Aug 1989—Godown Rd., drainage ditch, between Commerce Pl. & LeAnne Marie Circle, Perry Twp., Lowden 4243; 31 Jul 1990—W bank of Scioto R. at Hayden Falls just S of Hayden Run Rd., Norwich Twp., Lowden 4471; 8 Aug 1990—Elliott Rd., 0.5 mi. NW of Scioto-Darby Creek Rd., Brown

Twp. *Lowden 4514*; 30 Jun 1991—E bank of Scioto R., from Trabue-Murphy landing to 0.5 mi. N of Fishinger Rd. bridge, Perry Twp., *Lowden 4748*;  
5 Jul 1991—E bank of Olentangy R., between Lane Ave. & King Ave., OSU campus, Cols., Clinton Twp., *Lowden 4768*.

4. *Asclepias exaltata* L.

Poke Milkweed

Stems erect; leaves opposite, petiolate; blades tapering to base and apex; corolla white or purplish; hoods toothed at apex with horn extending beyond the hood; follicle pedicels deflexed. Syn.: *A. phytolaccoides* Lyon, *A. phytolaccoides* Pursh

REFERENCES: Riddell 1834:156; Sullivant 1840:40; Selby & Craig 1890:12; Cooperrider 1995:317 (illus. p. 318).

HERBARIUM RECORDS: Jul 1891—near Westerville, *Selby*; 3 Sep 1892—Cols., *Bogue*.

5. *Asclepias syriaca* L. forma *syriaca*

Common Milkweed

Stems erect; leaves opposite, petiolate; blades with lateral veins diverging from midrib at right angles; umbels numerous, mostly axillary; corolla pale purple to greenish-purple; hoods pink to tan, ovate and obtuse at apex, 3-4 mm long; horns present; follicles softly spinulose, on deflexed pedicels.

REFERENCES: Riddell 1834:156; Sullivant 1840:40; Craig 1890:90 (*Asclepias cornuti* Decne., Common Milkweed, rather common along the brook and in fields near the river, 9 Jul 1882, 19 Jun 1887, 21 Jun 1888); Selby & Craig 1890:12 (*Asclepias cornuti* Decne.); Cooperrider 1995:319 (illus. p. 316).

HERBARIUM RECORDS: 26 Jul 1882—OSU, Cols., *Devol*; Jul 1888—Cols., *Craig*; May 1890—Franklin Co., *Selby* (WOOS); 9 Jul 1891—OSU campus, near Cols., *Hine*; 1 Sep 1899—Cols., *Helfrich*; 21 Jul 1986—Highbanks Metro Park (Delaware Co.), field, *Watts 334* (OS, OWU); 19 Jul 1989—Antrim Park, Sharon Twp., *Lowden 4210*; 10 Jul 1990—Antrim Park, Sharon Twp., *Lowden 4433*; 25 Jul 1992—OSU Prairie Plant Reserve, jct. Kinnear Rd. & North Star Ave., Clinton Twp., *Lowden 5002*.

6. *Asclepias purpurascens* L.

Purple Milkweed

Stems erect; leaves opposite, petiolate; blades with lateral veins diverging from midrib at an 80°-90° angle; corolla reddish-purple, hoods dull red-purple, oblong and abruptly narrowed at apex, 5-7 mm long; horns present; follicles without spines.

REFERENCES: Riddell 1834:156 (*Asclepias amoena*, dry prairies); Riddell 1835:67 (*Asclepias amoena* Willd., Worthington, wet prairies); Sullivant 1840:40 (*Asclepias amoena* L.); Selby & Craig 1890:12; Cooperrider 1995:315 (illus. p. 316).

HERBARIUM RECORDS: 31 May 1896—Cols., *E. M. Wilcox*; Summer 1938—OSU Botanical Gardens, *C. Jones*.

7. *Asclepias quadrifolia* Jacq.

Four-leaved Milkweed

Stems erect; some leaves usually in a whorl of 3-4, the rest usually opposite, petiolate; corolla light pink, 4-5 mm long, hoods whitish; horns present.

REFERENCES: Riddell 1834:156 (open woods); Sullivant 1840:40; Selby & Craig 1890:12 (*Asclepias quadrifolia* L.); Cooperrider 1995:317 (illus. p. 318).

HERBARIUM RECORDS: 1840—Cols., *Sullivant*; 30 May 1896—W. Cols., *M. Wright*; Spring 1889—Cols. & near Cols., *Craig*; Jun 1889—Cols., *Craig*; 6 Jun 1891—Morgan Station, *Selby* (WOOS); 7 Jul 1892—near Cols., *E. M. Wilcox*; 2 Jun 1980—N side of Walnut St. & E side of Hoover Reservoir, woods, Blendon Twp., *W. Carr 2867* (KE); 31 May 1993—jct. of Graessle Rd. & Rt. 665, bluffs, Battelle Darby Metro Park, Pleasant Twp., *Lowden 5059*; 1 Jun 1993—Camp Mary Orton, Flint Ravine, bluff edge, W of Rt. 23, N of Worthington, Sharon Twp., *Lowden 5068*.

8. †*Asclepias variegata* L.

White Milkweed

Stems erect; leaves opposite, petiolate; umbels dense with 25 or more flowers on stiff pedicels; corolla white or pale pink; hoods purple to white above; horn hidden behind hood.

REFERENCES: Werner 1893:93 (Georgesville, *Werner*); Roberts & Cooperrider 1982:63; McCance 1984:A-298; Cooperrider 1995:317 (illus. p. 320).

HERBARIUM RECORD: 1 Jul 1891—Georgesville, *Werner*.

NOTE: Sullivant 1840:40 and Selby & Craig 1890:12 reported on plants collected in adjacent counties.

9. *Asclepias sullivantii* Engelm.

Sullivant's Milkweed, Prairie Milkweed

Stems erect; leaves opposite, hardly petiolate; blades slightly undulate with plane margin, upper pair usually longer than peduncles; leaf bases not clasping, rounded to subcordate or cordate; corolla purple to pinkish-white; hood pink to pinkish-purple, surpassing horn and stigma.

REFERENCES: Gray in Engelmann 1848:366 (Type locality, near Cols., *Sullivant*); Selby & Craig 1890:12; Cooperrider 1995:319 (illus. p. 320).

HERBARIUM RECORD: 10 Jul 1937—Franklin Co., *C. Jones*.

10. †*Asclepias viridis* Walter

Spider Milkweed

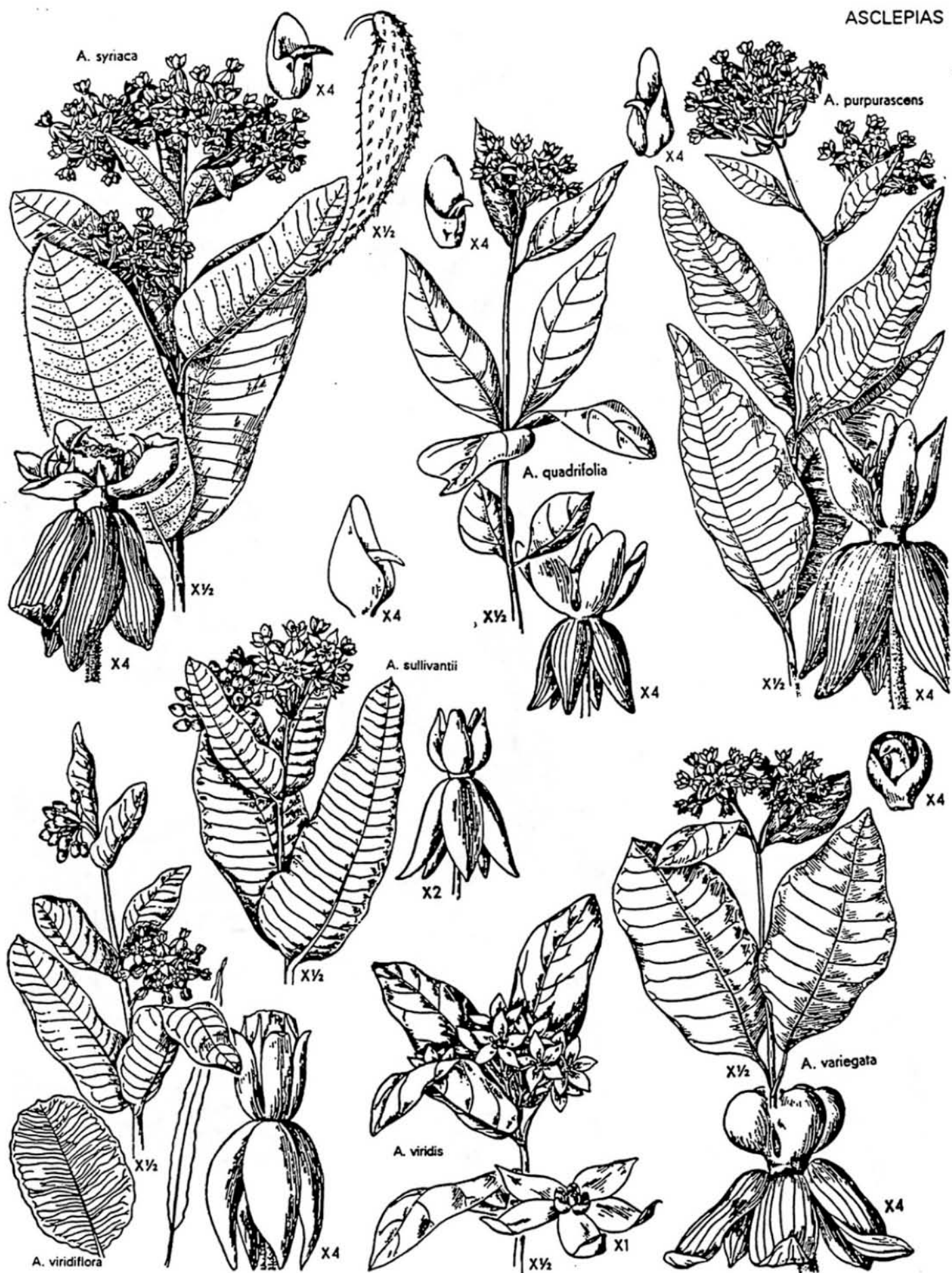
Leaves oblong to elliptic, mostly alternate; fruiting pedicels deflexed; corolla rotate, wide spreading more than 10 mm long, greenish; hood hornless, purplish, with a crest or keel. Syn.: *Asclepiodora viridis* (Walter) A.Gray

REFERENCE: ODNr-DNAP 1996.

NOTE: Sight record by Richard Moseley, Battelle-Darby Creek Metro Park, 2 plants on heavily eroded hillside. No specimens seen from Franklin Co. Not mapped for Franklin Co. by Cooperrider 1995:314 (illus. p. 310).



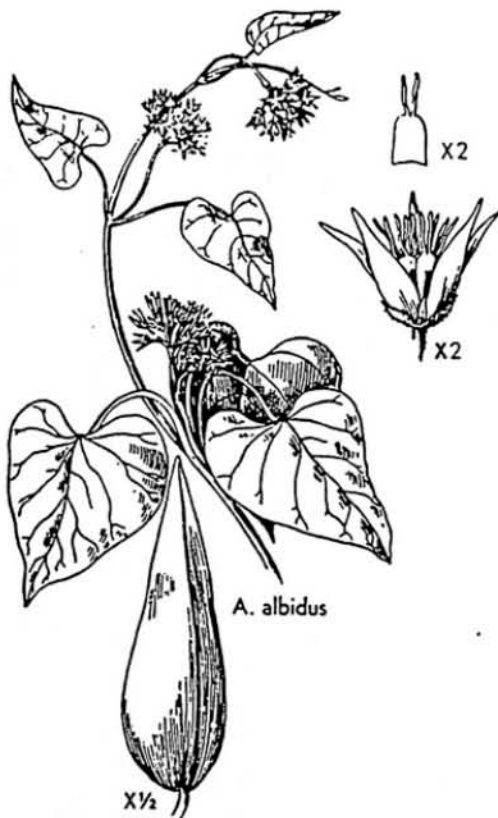
ASCLEPIAS



VINCETOXICUM  
AMPELAMUS  
MATELEA  
NICOTIANA  
NICANDRA  
PHYSALIS



V. nigrum X2



A. albidus

X1/2



M. obliqua

X1/2

X2



Nica. physalodes

X1/2



Nico. tabacum

X1/2



P. alkekengi

X1/2

11. †*Asclepias viridiflora* Raf. Green-flowered Milkweed

Stems erect; leaves mostly opposite, petiolate, variable in shape, lateral veins horizontal; corolla and hoods green or pale green; hoods about 4.0 mm long reaching middle or tip of anthers, sessile, without a crest or keel within; flowers lacking horns. Syn.: *Acerates viridiflora* (Raf.) Eaton

REFERENCES: Selby 1892a:110 (*Acerates viridiflora* Elliott, Georgesville, Werner); ODNR-DNAP 1996; Cooperrider 1995:321 (illus. p. 322).  
HERBARIUM RECORDS: 1 Jul 1891—Big Darby Creek, Selby; 1 Jul 1891—Georgesville, Werner (CLM); 15 Jul 1892—Franklin Co. & Georgesville, Bogue; 5 Jul 1979—W-facing bluffs above Big Darby Creek, Darby Creek Metro Park just N of scenic lookout, W of Koebel-Suydam Rd., Pleasant Twp., Galloway Quad., Cusick 19462 (KE).

2. VINCETOXICUM Wolf Swallow-wort

Twining; leaves opposite or rarely whorled; blades ovate or lance-ovate; flowers small, in peduncled axillary clusters; corolla purple, longer than corona and stamens; fruit smooth; seeds comate. (Often incl. in *Cynanchum* L.)

1. \**Vincetoxicum nigrum* (L.) Moench Black Swallow-wort  
Naturalized (native of S Europe)

Stems twining; leaf base rounded to subcordate; corolla purple to brown; fruit smooth. Along railroads. Syn.: *Cynanchum nigrum* (L.) Pers.

REFERENCE: Cooperrider 1995:323 (illus. p. 324).  
HERBARIUM RECORD: 10 Aug 1969—along RR just E of Indianola Ave. a short distance S of Woodsfield Dr., Cols., McCabe.

3. AMPELAMUS Raf. Sandvine

Twining; leaves opposite, blades lance-ovate or ovate, cordate; flowers in peduncled axillary clusters; corolla white, about 6 mm long, corona about as long; fruit smooth; seeds comate.

1. *Ampelamus albidus* (Nutt.) Britton Sand-vine, Honey-vine

Stems twining; leaf base deeply cordate; corolla white; fruit smooth. Thickets, riverbanks & fencerows. Syn.: *Cynanchum laeve* (Michx.) Pers., *Gonolobus laevis* Michx.

REFERENCE: Cooperrider 1995:323 (illus. p. 324).  
HERBARIUM RECORDS: 24 Nov 1928—W bank of Scioto R., along RR embankment, S of Greenlawn Ave., Cols., Gordon; Sep 1929—along Olentangy R., OSU campus, Blaydes; 7 Dec 1931—Hague Ave., Cromwell Farm, Shetrone; 1 Aug 1973—Elmwood Ave. at 3rd Ave., Cols.-Grandview, Roberts 4060; 6 Sep 1986—Highbanks Metro Park (Delaware Co.), open field, Witsberger 929 (OS, OWU); 11 Aug 1989—Trabue Murphy Landing, along E bank of Scioto R., just S of Fishinger Rd. bridge, Perry Twp., Lowden 4268B; 24 Aug 1989—along RR tracks on Highland Dr., between Olentangy River Rd. & Kenny Rd., S of Henderson Rd., Clinton Twp., Lowden 4293; 31 Jul 1990—Whetstone to Northmoor Park, along E bank of Olentangy R., Clinton Twp., Lowden 4459; 9 Aug 1990—S side of Rt. 317, jct. Parsons Ave. & Big Walnut Creek, Hamilton Twp., Lowden 4543.

4. MATELEA Aubl. Angle-pod

Twining; leaves opposite, blades ovate to circular, deeply cordate; flowers in peduncled axillary cymes; corolla brown-purple, lobes narrow, much longer than corona and stamens; seeds comate. (*Gonolobus* Michx.)

1. †*Matelea obliqua* (Jacq.) Woodson Angle-pod

Stems twining, hirsute; leaves ovate to orbicular, base cordate, petioles hirsute; corolla brown-purple; fruit spinulose. Syn.: *Gonolobus obliquus* (Jacq.) Roem. & Schult.

REFERENCES: Werner 1893:93 (*Gonolobus obliquus* R.Br., banks of Scioto R., 1892, Selby; near Georgesville, Hine); ODNR-DNAP 1996; Cooperrider 1995:323 (illus. p. 322).  
HERBARIUM RECORDS: 15 Oct 1892—Scioto R., Selby; 14 Jul 1893—Fishinger's Mill, Cols., Selby (OS, WOOS); Oct 1907—Fishinger's Mills, Griggs; 1 Sep 1908—Fishinger's Mill, Griggs; 5 Jul 1979—Darby Creek Metro Park, 0.3 mi. W of Alkire Rd. & Koebel-Suydam Rd., open woods, Pleasant Twp., Galloway Quad., Cusick 19463 (KE).

SOLANACEAE, Nightshade Family