

Manual of the Vascular Plants of Franklin County Richard M. Lowden (1997)

Herb, erect; leaves pinnately compound; leaflets commonly 4-8 pairs, oblong or elliptic, longer than 3 cm, not sensitive to touch; petiolar gland short-cylindric, rounded or dome-shaped; ovary appressed-pubescent; fruits flat, glabrous, segments wider than long. Syn.: Cassia marilandica L.

REFERENCES: Riddell 1834:118; Sullivant 1840:19 (Wild Senna); Craig 1890:77 (American Senna; Ernest Evans found this last August in the clover meadow near the river, but I have been unable to find it this spring, 2 Aug 1882); Selby & Craig 1890:9.

HERBARIUM RECORD: 3 Aug 1882—S of Cols., W. Green.

# FABACEAE, Pea or Bean Family

Herbs and woody plants; leaves alternate, with pulvini, usually stipuled, usually compound; flowers bisporangiate, rarely solitary; inflorescence various, a spike, raceme, panicle, head or umbel; calyx of 5 (rarely fewer) united sepals, the teeth or lobes sometimes fewer than five; petals 5 (rarely 1 or none); corolla zygomorphic and papilionaceous, petals separate below, odd petal (standard) outside in bud, enclosing the 2 lateral petals (wings) and the 2 inner somewhat connivent petals (keel); stamens 5-many, rarely fewer than 5, usually 10, separate, monadelphous, or diadelphous, sometimes alternately long and short; carpel 1, ovary 1-loculed or rarely 2-loculed; placenta 1, parietal; fruit a legume, sometimes indehiscent, sometimes divided crosswise into 1-seeded segments (loment). (Papilionaceae=Leguminosae-Papilionoïdeae)

Planted or cultivated species not included in the key below are: Colutea arborescens L. (Bladder Senna), reported by Craig 1890:53 (University Farm Sep & Oct 1887), a shrub having odd-pinnate leaves; leaflets 7-13, oval to obovate; racemes axillary; flowers yellow, marked with red; stamens 10; pods inflated, bladdery, ovoid or fusiform (16 Jun 1882—University Campus, Devol; 6 Jul 1883—University Campus, Devol; Jul 1888—Cols., Craig). Dolichos lablab L. (Hyacinth Bean, Egyptian Bean), having twining stems; leaflets broadly rhombic-ovate; flowers purple or white; calyx lobes 4 by fusion of the upper 2; pods approx. 5 cm long (27 Sep 1900—Cols., J. H. Schaffner). Glycine max (L.) Merr. (Soybean), with stems erect, brown-hairy, bushy with some shoots vine-like; leaves 3-foliolate; leaflets ovate, entire, obtuse or short acute; flowers white or purple; pod brown hairy, hanging on short stalk; seeds 2-4, globose, brown, yellow or black (25 Sep 1913—Cols., J. H. Schaffner). Petalostemum purpurem (Vent.) Rydb. (22 Oct 1904—a waif on the OSU Campus, J. H. Schaffner; 5 Jul 1932—OSU Bot. Gardens, cult., Hicks). Pisum sativum L. (Garden Pea; May 1909—Franklin Co., cult., A. Crane; 6 Jun [yr.?]—Westerville, Zinn). Sophora japonica L. (30 Jul 1974—OSU Campus, near Mershon Auditorium parking lot on 17th Ave., tree to approx. 30 feet tall, Roberts 4404).

- a Trees and shrubs.
  - b Petal 1, the standard, dark-purple; leaves pinnately compound, gland-dotted. 17. AMORPHA
  - b' Petals more than 1; petals white or pink; leaves odd-pinnate.
    - c Flowers in racemes; stamens diadelphous. 6. ROBINIA
    - c' Flowers in elongate panicles; stamens separate. 1. CLADRASTIS
- a' Herbs, sometimes twining, and woody vines.
  - d Leaves with terminal tendrils.
    - e Style filiform, terete, hairy all around at tip. 13. VICIA
    - e' Style flattened, hairy on side toward free stamen; usually leaflets longitudinally veined or stipules conspicuous. 14. LATHYRUS
  - d' Leaves without tendrils.
    - f Leaves simple. 3. CROTALARIA
    - f' Leaves 3-foliolate. (See f''.)
      - g Leaflets serrulate.
        - h Flowers in long slender racemes; petals white or yellow. 11. MELILOTUS
        - h' Flowers in heads, short spikes, or short racemes.
          - i Fruits curved or coiled; petals not united with stamen-tube. 12. MEDICAGO
          - i' Fruits not curved or coiled; keel and lateral petals somewhat united with stamen-tube. 10. TRIFOLIUM
      - g' Leaflets entire or rarely lobed.
        - j Stamens separate; flowers showy, in racemes. 2. BAPTISIA
        - j' Stamens monadelphous or diadelphous.
          - k Petals yellow or orange; flowers in headlike umbels. 8. LOTUS

- k' Petals not yellow or orange, rarely yellowish-white or fading to yellow in age.
  - 1 Fruit a loment of 2-several segments, pubescent, each hair curved or hooked at tip; leaflets with or without stipels; flowers in simple or panicled racemes; stem sometimes prostrate, not twining. 15. DESMODIUM
  - I' Fruit not a loment.
    - m Leaflets without stipels; stems not twining.
      - n Blades gland-dotted; racemes and peduncles axillary, elongate; fruit crosswrinkled. 18. ORBEXILUM
      - n' Blades not gland-dotted; fruit not cross-wrinkled.
        - o Calyx subtended by small bracts; stipules free from petiole. 16. LESPEDEZA
        - Calyx without bracts; stipules united with petiole; flowers in dense heads.
           10. TRIFOLIUM
    - m' Leaflets with stipels; stems often twining.
      - p Style bearded lengthwise on upper surface; flowers solitary or in small clusters on axillary peduncles. 19. CLITORIA
      - p' Style glabrous except sometimes at base; flowers in racemes. 21. AMPHICARPA
- f" Leaflets more than 3; leaves pinnately compound.
  - q Flowers in umbels or heads.
    - r Corolla yellow; leaflets 5, lower pair stipulelike. 8. LOTUS
    - r' Corolla rose-purple to blue; leaflets many. 9. CORONILLA
  - q' Flowers in racemes.
    - s Vines.
      - t Herbaceous; corolla brown-purple; leaflets 5-7. 20. APIOS
      - t' Woody; corolla lavender-blue; leaflets 7-many. 5. WISTERIA
    - s' Not vines.
      - u Standard ovate or circular; fruit flattened, villous; tenth stamen partly free. 4. TEPHROSIA
      - u' Standard narrow; fruit terete; tenth stamen free. 7. ASTRAGALUS

#### 1. CLADRASTIS Raf. Yellowwood

Tree with yellow wood; leaves odd-pinnate, oval or ovate leaflets alternate on rachis; lateral buds superposed, enclosed by hollow base of petiole; stipules none; flowers 2-2.5 cm long, in large drooping terminal panicles; corolla white; stamens 10, separate; fruit stalked in the calyx, flat, several-seeded.

#### 1. \*Cladrastis lutea (F.Michx.) K.Koch

Planted Ornamental (native of E U.S.)

Tree, smooth gray bark, wood yellow; leaves odd-pinnate; leaflets alternate on rachis, oval or ovate; flowers in loose elongated, drooping panicles; corolla white; stamens 10, separate; fruit narrow, flat, few-seeded, stalked in the calyx.

HERBARIUM RECORDS: 11 Oct 1930 (fruits)—OSU Campus, Hicks; 24 May 1967 (flowers)—OSU, SE corner across from back of Union, Cols., Cooke & Stuckey.

NOTE: Not mentioned for Franklin Co. by Braun 1961:227.

### 2. BAPTISIA Vent. False-indigo

Herbs; leaves palmately 3-foliolate, usually blackening in drying; flowers in racemes; calyx 4-5-toothed; stamens 10, separate; ovary stipitate in persistent calyx; fruit inflated.

- a Racemes 1-few, several- to many-flowered; flowers 1.8-3 cm long. 1. B. lactea
- a' Racemes few-flowered, many, at ends of many branches; flowers 1-1.5 cm long. 2. B. tinctoria

# 1. †Baptisia lactea (Raf.) Thieret

Prairie False Indigo, Milky Wild Indigo

Yellow-wood

Herb 1-2 m high, widely branched, glabrous and glaucous; leaves 3-foliolate, usually blackening in drying; leaflets entire, obovate to oblanceolate; stipules lanceolate; racemes 1-several, erect, many flowered; calyx lobes pubescent



inside; flowers white with a tinge of purple on the standard, 18-25 mm long; stipe of the ovary twice as long as the calyx; stamens 10, separate; pods thick, drooping. Syn.: B. leucantha Torr. & A.Grav

REFERENCES: Riddell 1834:118 (Baptisia alba, dry prairies); Sullivant 1840:19 (Baptisia alba R.Br.); Selby & Craig 1890:9 (#167 Baptisia alba R.Br. & #168); McCance 1984:A-229; ODNR-DNAP 1996.

HERBARIUM RECORDS: 1834—Duncan Plains, J. Paddock Collection (ILL); 10 Aug 1890—Big Walnut, Central College, E. V. Wilcox; Jun 1891—Central College, Selby (CLM); Jun 1891—Georgesville, Werner (CLM); 8 Jul 1891—Central College, Cols., Selby; 2 Jul 1900—Georgesville, Coberly; 9 Aug 1982-Hoover Reservoir, 0.05-0.15 mi. W of Cubbage Rd., 0.5-0.6 mi. N of jct. of Central College Rd., paths & openings in brushy field, Blendon Twp., New Albany Quad., Cusick 21922; 28 Jun 1990-Hoover Dam Park, just W of entrance off Cubbage Rd., 0.5 mi. S of Walnut St., open brushy field, Blendon Twp., Lowden 4422; 3 Sep 1992-W side of Cubbage Rd., approx. 1/2 mi. S of Walnut St., dry openings in brushy field, Blendon Twp., New Albany Quad., McCormac 4892.

### 2. Baptisia tinctoria (L.) R.Br.

Yellow Wild Indigo

REFERENCES: Sullivant 1840:19; Selby & Craig 1890:9.

NOTE: No specimens seen from Franklin Co.

### 3. CROTALARIA L. Rattlebox

Leaves simple, oval or the upper ones narrower; stipules inversely sagittate; corolla yellow, shorter than calyx; stamens monadelphous, the sheath split on upper side; anthers of 2 forms; peduncles terminal and axillary, racemes few-flowered; fruit coriaceous, inflated, the several seeds loose at maturity.

### 1. \*†Crotalaria sagittalis L.

Weedy Rattlebox

Adventive (native of NE U.S.)

Herb, stem erect; with spreading or loosely ascending hairs; leaves simple, lanceolate to linear, nearly sessile, pubescent on both sides; stipules inversely sagittate, decurrent on the upper stem; corolla yellow, shorter than calyx; fruit coriaceous, nearly sessile in the calyx, inflated, the several seeds loose at maturity. HERBARIUM RECORD: Sep 1896-OSU Campus, Cols., Tyler.

#### 4. TEPHROSIA Pers.

Silky-villous herb; leaves odd-pinnate, the several leaflets entire, oblong to elliptic, with mucronate apex; flowers 1.5-2 cm long, in a terminal raceme; standard yellowish, pubescent on outside; wings and keel pink or rose-purple, coherent; stamens 10, 1 partly free, 9 united; fruit linear, pubescent, several-seeded.

### 1. Tephrosia virginiana (L.) Pers.

Goat's Rue, Devil's Shoestring

Herb, silky-villous; leaves compound, odd-pinnate; leaflets mostly 15-25, elliptic or linear-oblong with mucronatetips; racemes compact, terminal to the main stem and sometimes to axillary branches; flowers bicolored, the standard yellowish-white, the wings and keel pink or pale purple; fruit strigose to villous.

HERBARIUM RECORD: 1840-Cols., Sullivant.

NOTE: Sullivant 1840:20 and Selby & Craig 1890:9 reported on plants collected in adjacent counties.

#### 5. WISTERIA Nutt. Wisteria

Woody twining vines, leaves compound, odd-pinnate; flowers blue, in large handsome racemes at end of short branches, appearing before leaves fully expand.

#### 1. Wisteria frutescens (L.) Poir.

Atlantic Wisteria

Vine, high climbing, stems woody; leaves pinnately compound; leaflet 7-many; racemes many-flowered, reaching 15 cm long; upper lip of the calyx less than half as long as the calyx tube, lower lobes longer; corolla lavender-blue; ovary and fruit glabrous.

HERBARIUM RECORDS: 8 Jun 1911-Westerville, Hanawalt; 9 Jun 1927-State St., Westerville, swamps, Burchard; 18 May 1987-entrance to Colony Square Apartments, 680-692 Riverview Dr., brushy neglected thicket, Cols., T. Lammers 6101. NOTE: Not mentioned for Franklin Co. by Braun 1961:230.

### 6. ROBINIA L. Locust

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Trees or shrubs; leaves odd-pinnate, leaflets entire; flowers 2-2.5 cm long, in axillary or terminal racemes; corolla white, pink, or rose; stamens diadelphous; fruit flat, several-seeded.

- a Trees; corolla white; twigs and fruit glabrous or puberulent; stipular spines usually present. 1. R. pseudoacacia
- a' Shrubs; corolla pink to rose-purple; twigs and peduncles covered with brown bristlelike hairs; stipules setaceous, not spines. 2. R. hispida

# 1. \*Robinia pseudoacacia L.

Black Locust .

Naturalized (native of E U.S.)

Tree, twigs glabrous or puberulent; leaves compound, odd-pinnate; leaflets 7-19, oval to elliptic; stipular spines usually present; racemes drooping, many-flowered; corolla white, fragrant; ovary glabrous; fruits flat, smooth.

REFERENCES: Riddell 1834:118 (bottomland); Sullivant 1840:20 (Locust Tree); Craig 1890:76 (Locust, False Acacia; several large trees on the campus, and there is a grove of small trees on the W side of the island, 4 Jun 1883, 23 May 1884, 26 May 1885, 17 May 1887, 27 May 1888); Selby

& Craig 1890:9; Braun 1961:229 (illus. p. 228).

HERBARIUM RECORDS: May 1890—Cols., Selby; Jun 1893—near Cols., E. M. Wilcox; 1897—OSU Campus, Ruppersberg 37; 22 Jun 1901—N of Cols., Mead; Fall 1907—OSU Campus, McCray; 27 May 1911—Otterbein campus, Westerville, Hanawalt; [ca. 1982]—Blendon Woods, Owens; 15 Sep 1987—Highbanks Metro Park (Delaware Co.), interface of farm area & bottoms, B. Reed; 20 May 1988—W bank of Olentangy R., S side of Woody Hayes Dr., [OSU Campus], Cols., Gerberick 40; 22 May 1988—W bank of Olentangy R. near Lane Ave., Cols., Kelly 26; 26 May 1988—OSU, W of Cannon Dr., SW of Lincoln Tower, Chinery 58; 11 May 1991—Hoover Dam Reservoir, Walnut St. at dead end, Blendon Twp., Lower 4605

# 2. \*Robinia hispida L.

Bristly Locust, Rose-acacia

Adventive (native of SE U.S.)

Shrub, twigs and peduncles covered with brown bristle-like glandular hairs; leaves compound, odd-pinnate; leaflets entire, 7-13, ovate-oblong to subrotund; stipules setaceous; racemes 2-10 flowered; corolla rose or pink-purple; ovary densely glandular; fruit densely hispid.

HERBARIUM RECORDS: 18 May 1986—Weybridge Rd., approx. 10 m from intersection with Kenny Rd., woodlot, perhaps escaped cultivar, Cols., Taylor-Lehman 52; 28 May 1992—Rt. 33, E side of Scioto River Rd., just S of Griggs Reservoir & N of Lane Ave., Perry Twp., Lowden 4966; 30 Jun 1992—exit onto I-270 going W off Rt. 23, just N of Worthington, Sharon Twp., Lowden 4978.

NOTE: Not mentioned for Franklin Co. by Braun 1961:229.

#### 7. ASTRAGALUS L. Milk-vetch

Leaves odd-pinnate, leaflets entire; flowers in spikes or racemes; corolla white, yellowish, or purple, usually long and narrow; stamens 10, diadelphous; fruit sometimes partially or wholly divided lengthwise into 2 locules.

#### 1. Astragalus canadensis L.

Canada Milk-vetch

Herb, stems erect; leaves odd-pinnate, leaflets entire; stipules connate, deltoid; racemes long-peduncled, dense, with many spreading or somewhat reflexed, yellowish to white flowers; calyx tube approx. 5 mm long, lobes 1 mm long; corolla zygomorphic, standard narrow; stamens 10, diadelphous; pods numerous, crowded, erect, 2-loculed, less than 1 cm thick, scarcely inflated, subterete with the ventral suture keeled.

REFERENCES: Sullivant 1840:18; Selby & Craig 1890:9.

HERBARIUM RECORDS: 1840-Cols., Sullivant; 15 Jul 1892-Georgesville, Bogue.

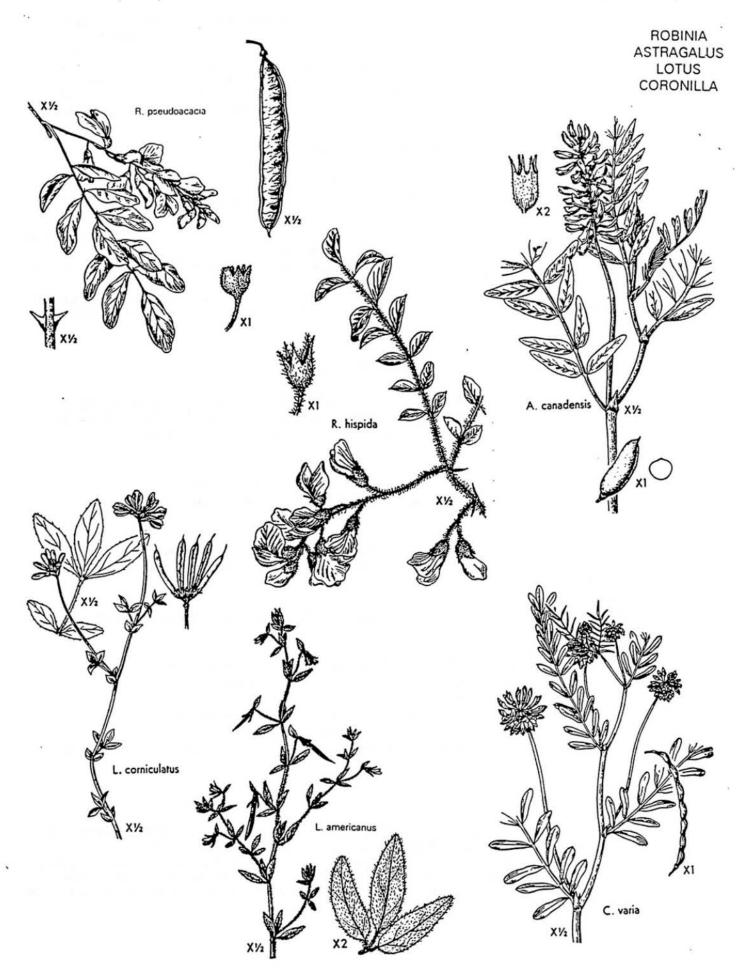
#### 8. LOTUS L.

Herb with 5-foliolate pinnately-compound leaves, often with glands in position of stipules, the 2 lower leaflets remote from the others and appearing to be stipules; flowers about 1 cm long, in headlike umbels on axillary peduncles; petals yellow or marked with red or brown; stamens diadelphous; fruit several-seeded.

Lotus americanus (Nutt.) Bisch. was collected on the OSU Campus (30 Sep 1897—Tyler; 6 Oct 1897—Kellerman).

\*Lotus corniculatus L.
 Adventive (native of Europe)

Birdsfoot-trefoil



Herb; leaves pinnately compound; leaflets entire, 5, sometimes appearing 3-foliolate, lowest pair stipule-like; flowers in head-like umbels or axillary peduncles; corolla yellow or marked with red or brown; stamens diadelphous; fruit linear, several-seeded.

HERBARIUM RECORDS: 3 Jun 1926—Franklin Co., J. H. Schaffner; 21 Jun 1982—Blendon Woods, Owens; 31 May 1986—Highbanks Metro Park (Delaware Co.), field, Morawetz 14 (OS, OWU); 10 Jul 1986—OSU Campus, banks of the Olentangy R., E. King 7; 28 May 1988—1/4 mi. N of Bethel Rd. & Rt. 315, Kelly 39; 4 Jun 1989—Olentangy River Rd., just S of Henderson Rd. between Olentangy River Rd. & Rt. 315, Cols., Clinton Twp., Lowden 4092; 5 Aug 1989—along Godown Rd., between Commerce Pl. & LeAnne Marie Circle, Perry Twp., Lowden 4255.

#### 9. CORONILLA L. Crown-vetch

Herb; stems ascending; leaves odd-pinnate; leaflets oblong, several-many; flowers in umbels on axillary peduncles; corolla purple or pink; stamens diadelphous; fruit linear, coriaceous, transversely segmented.

#### 1. \*Coronilla varia L.

Crown-vetch

Planted along highways to Naturalized (native of the Mediterranean region)

Herb, stems loosely ascending; leaves odd-pinnate, sessile; leaflets oblong to obovate; flowers in umbels, pinkish; fruits linear, 4-angled, 3-7 joints.

HERBARIUM RECORDS: 26 Jun 1968—N side of Kenny Rd. & Bethel Rd. intersection, Perry Twp., Moser, 17 Jul 1987—Highbanks Metro Park (Franklin/Delaware Co. Line), open area under powerline, Watts; 14 Jun 1989—OSU Campus, between B&Z Bldg. and Biological Science Bldg., parking area, Cols., Lowden 4164.

#### 10. TRIFOLIUM L. Clover

Herbs; leaves 3-foliolate, leaflets usually serrulate; stipules united with petioles for part of their length; flowers small, in heads or short dense racemes; claws of petals more or less united with stamen tube; stamens diadelphous; fruit short and straight, often included in persistent calyx, indehiscent or tardily dehiscent, 1-6-seeded.

- a Corolla yellow.
  - b Leaflets all sessile or nearly so; stipules about equaling the petiole. 8. T. aureum
  - b' Terminal leaflet stalked; stipules about half as long as the petiole. 9. T. campestre
- a' Corolla not yellow.
  - c' Inflorescence longer than wide.
    - d Corolla crimson; flowers 12 mm long or more; leaflets obovate. 2. T. incarnatum
    - d' Corolla grayish-white or pink; flowers no more than 7 mm long; leaflets oblanceolate or narrower.

      3. T. arvense
  - c' Inflorescence globose.
    - e Flowers sessile or nearly so; corolla rose-purple to white; one or two leaves just under the head.

      1. T. pratense
    - e' Flowers stalked.
      - f Calyx lobes twice as long as tube or more, pubescent, sometimes minutely so.
        - g Leaflets broadly obovate; plants stoloniferous. 6. T. stoloniferum
        - g' Leaflets narrower; plants not stoloniferous. 7. T. reflexum
      - f' Calyx teeth longer or shorter than tube but not twice as long; calyx glabrous or nearly so.
        - h Leaf-bearing stems erect; calyx tube shorter than the shorter teeth. 5. T. hybridum
        - h' Leaf-bearing stems repent; petioles and scapes erect; calyx tube longer than the shorter teeth.
           4. T. repens

# 1. \*Trifolium pratense L.

Red Clover

Naturalized (native of Europe)

Herb, stems ascending or suberect, hairy; stipules oblong, narrowed to a short awn; head globose, short-peduncled or sessile, with 1-2 leaves just under the inflorescence; flowers sessile; corolla rose-purple to white.

REFERENCES: Riddell 1834:118 (naturalized); Sullivant 1840:20 (naturalized plants); Craig 1890:53, 56, 75 (very abundant in meadows and pastures, 14 May 1882, 22 May 1883, 21 May 1884, 26 May 1885, 12 May 1887, 23 May 1888; four or five-leaved specimens are frequently found; sixes more rarely, and on one occasion only have I found a seven-leaved clover, Jun 1886; sometimes in a 3-leaved specimen there is a small cup-like

leaf in the center; last summer I found a 1-leaved clover, the leaflet is slightly lobed on one side and is a little larger than usual; University Farm Sep & Oct 1887 & 12 Nov 1888); Selby & Craig 1890:9 (introduced).

HERBARIUM RECORDS: Jun 1888—Cols., Craig; 6 Jul 1892—Cols., Bogue; May 1896—Worthington, M. Wright; 30 May 1911—Westerville, Hanawalt; 25 May 1922—Westerville, fields, A. Mayne; 27 May 1922—Otterbein campus, Westerville, Detamore; 9 Jun 1927—Home St., Westerville, Burchard; Summer 1938—OSU Botanical Garden, C. Jones; 16 Jul 1968—S side of Bethel Rd., abandoned field ¼ mi. W of intersection with Godown Rd., Perry Twp., Moser, 16 May 1970—Olentangy Blvd. & N. Broadway, Boone 154; 2 Jun 1982—Blendon Woods, Owens; 1 Jun 1986—front of Worthington High School Environmental Bldg. off Rt. 161, Benkowski 47; 21 Jul 1986—Highbanks Metro Park (Delaware Co.), field, Watts 335 (OS, OWU); 21 Sep 1986—Highbanks Metro Park (Franklin Co.), open field, Higgins; 28 May 1988—¼ mi. N of Bethel Rd. & Rt. 315, Cols., Kelly 41; 4 Jun 1989—E side of Olentangy River Rd., W of Rt. 315 & just S of Henderson Rd., Clinton Twp., Lowden 4096; 6 Jun 1989—Turkey Run, between Olentangy River Rd. & Pegg Ave., just S of Highland Dr. (S of Henderson Rd.), Clinton Twp., Lowden 4126.

### 2. \*Trifolium incarnatum L.

Crimson Clover

Adventive (native of Europe)

Herb, stems hairy; leaflets obovate; heads ovoid or cylindric, longer than wide, long-peduncled; flowers usually 12 mm or more long; calyx densely villous; corolla crimson.

HERBARIUM RECORDS: 13 Jul 1882—University Experimental Gardens, Cols., Devol; May 1894—Cols., W. Kellerman; 10 Jun 1933—Franklin Co., Bartley (BHO).

# 3. \*Trifolium arvense L.

Rabbit-foot Clover, Stone Clover

Naturalized (native of Eurasia & N Africa)

REFERENCE: Craig 1890:75 (in the grass-plot field N of Prof. Thomas' house, 10 Jul 1885).

NOTE: No specimens seen from Franklin Co.

### 4. \*Trifolium repens L.

White Clover

Naturalized (native of Eurasia)

Herb, stems creeping and rooting; petioles and scapes erect; heads globose, flowers stalked; calyx tube much longer than the shorter teeth, glabrous or nearly so; corolla white or tinged with pink.

REFERENCES: Riddell 1834:118; Sullivant 1840:20 (naturalized plants); Craig 1890:53, 56, 75 (common in clover fields and on the lawn but not so abundant as *Trifolium pratense*, 18 May 1882, 22 May 1883, 6 May 1884, 26 May 1885, 15 May 1887, 23 May 1888; a var. was found on the campus a few years ago in which each flower had a pedicel half an inch long; this spring I found several specimens growing S of the race track, which were more curiously modified, that is, the flowers were changed to leaves, for in each head came several leaves and the unchanged flowers were green instead of white, presenting a peculiar appearance; 4-leaved specimens are much more rare than in the red clover; University Farm Sep 1887 & 11 Nov 1888); Selby & Craig 1890:9 (introduced).

HERBARIUM RECORDS: 1834—Worthington, J. Paddock Collection (ILL); 6 Jun 1882—University Farm, Cols., Devol; Jun 1888—Cols., Craig; 14 Jul 1892—Cols., Bogue; 27 May 1896—Clintonville, M. Wright; 8 Jun 1911—Westerville, pasture, Hanawalt; 22 May 1924—Westerville, fields, I. Jones; 26 Jun 1968—S side of Bethel Rd., abandoned field 0.2 mi. W of intersection with Godown Rd., Perry Twp., Moser, 9 May 1970—Charing Rd., Upper Arlington, Boone 130; 19 May 1974—OSU Botany Garden, Cols., D. Johnson; 15 May 1986—Park of Roses, Cols., Blanco; 21 Jul 1986—Highbanks Metro Park (Delaware Co.), field, Watts 330 (OS, OWU); 4 Jun 1989—E side of Olentangy River Rd., W of Rt. 315, S of Henderson Rd., Cols., Clinton Twp., Lowden 4098.

# 5. \*Trifolium hybridum L.

Alsike Clover

Adventive (native of Eurasia)

Herb, leaf-bearing stems ascending, not rooting; inflorescences globose, flowers stalked; calyx glabrous or slightly pubescent, tube shorter than the shorter teeth, but teeth not twice as long as the tube; corolla white and pink, turning brown after anthesis.

REFERENCES: Craig 1890:75 (in the grass-plot field where it was formerly cultivated it has escaped from cultivation but is rather rare, 26 Jul 1882, 11 Jun 1887, 25 Jun 1888); Selby & Craig 1890:9 (introduced).

HERBARIUM RECORDS: Jun 1888—Cols., Craig; Jun 1890—Cols., Selby (OS, WOOS); 14 & 28 Jun 1892—Cols., Bogue; 5 Nov 1895—Alum Creek, Osburn; May 1896—N Cols., M. Wright; 24 May 1902—OSU Campus, J. Beattie; 30 May 1911—NE Westerville, meadow, Hanawalt; 1 Jun 1921—Westerville, open field, Kittle; 24 May 1922—Westerville, fields & roadsides, Jackson; 18 May 1923—Otterbein campus, Westerville, Ewing; 28 May 1923—Westerville, field & woods, E. Brown; Summer 1938—OSU Botanical Garden, C. Jones; 26 Jun 1968—S side of Bethel Rd., abandoned field, 0.2 mi. W of intersection with Godown Rd., Perry Twp., Moser; 16 May 1970—Olentangy Blvd. & N. Broadway, Boone 155; 7 Jun 1987—Highbanks Metro Park (Delaware Co.), field, Morawetz.

### 6. †Trifolium stoloniferum Muhl.

Running Buffalo-clover

Herb, stoloniferous; leaflets broadly obovate; heads globose, flowers stalked; calyx pubescent, teeth twice as long as tube or more; corolla white, often with pink-purple veins.

REFERENCES: Riddell 1834:118; Craig 1890:75 (sparingly on the hillside over the lake, in the woods and on the W side of the island, 30 May 1882, 10 Jun 1884, 27 May 1887, 29 May 1888); Selby & Craig 1890:9; Roberts & Cooperrider 1982:57.

HERBARIUM RECORDS: 8 Jun 1882—Central Insane Asylum Grounds, Cols., Devol; Spring 1889—Cols., Craig; 1890—Insane Asylum, Cols., Selby; 27 May 1895—Cols., W. Kellerman; 3 May 1896—Cols., McCall.



7. †Trifolium reflexum L. var. glabrum Lojac.

Annual Buffalo Clover

Herb, hairy or glabrous, stems branched from the base, erect or ascending, not stoloniferous; leaflets ovate, or narrowly obovate; heads globose, flowers stalked; calyx teeth twice as long as tube or more, glabrous throughout; corolla red-pink, or white.

REFERENCES: Riddell 1834:118 (Trifolium reflexum); Riddell 1835:23 (Trifolium reflexum, Worthington).

HERBARIUM RECORD: 1840-Cols., Sullivant.

### 8. \*Trifolium aureum Pollich

Palmate Hop-clover

Naturalized (native of Eurasia)

Leaflets all sessile or nearly so; standard striate-sulcate. Syn.: T. agrarium L., perhaps misapplied HERBARIUM RECORDS: 3 Jul 1925—Worthington, R. Crane (OWU); 1 Jul 1982—Blendon Woods, Owens; 28 Jun 1990—Hoover Dam Park, W side of Cubbage Rd., ½ mi. S of Walnut St., open thicket, Blendon Twp., Lowden 4425.

# 9. \*Trifolium campestre Schreb.

Pinnate Hop-clover, Low Hop Clover

Naturalized (native of Eurasia & N Africa)

Herb, stem pubescent; leaflets oblong-obovate, serrulate, the terminal one stalked; heads globose to short-cylindric, compact, usually more than 20 flowers; corolla yellow, standard conspicuously striate-sulcate in age. Syn.: T. procumbens L.

REFERENCES: Riddell 1834:118; Craig 1890:75 (not given in Beardslee's "Catalogue of the plants of Ohio," was recently introduced and is now growing on the campus a little SW of the college bldg.; only a few plants at present, 7 Jun 1884, 30 May 1887); Selby & Craig 1890:9 (introduced). HERBARIUM RECORDS: 23 Aug 1882—University Campus, Cols., W. Green; 7 Jul 1892—Cols., Bogue; 11 Jul 1892—Cols., Bogue.

#### 11. MELILOTUS Mill. Sweet Clover

Tall herbs, fragrant in drying; leaves 3-foliolate, leaflets serrulate, terminal one stalked; stipules partly adnate to petiole; flowers small, in elongate peduncled racemes; calyx lobes slender, nearly equal; stamens diadelphous; fruit ovoid, exceeding the calyx, indehiscent or finally dehiscent, 1-2-seeded.

- a Corolla white, 4-5 mm long; fruit reticulate. 1. M. alba
- a' Corolla yellow, 5-6 mm long; fruit cross-ribbed, glabrous or glabrate. 2. M. officinalis

#### 1. \*Melilotus alba Medik.

White Sweet-clover, Sweet-scented Clover

Naturalized (native of Eurasia)

Herb, fragrant when dried, stems erect, tall; leaves 3-foliolate, leaflets serrulate; flowers in long slender racemes; racemes usually numerous; corolla white, 4-5 mm long; fruit reticulate.

REFERENCES: Riddell 1834:118 (Melilotus leucantha, naturalized DC.); Craig 1890:53, 56, 75 (same situations as Melilotus officinalis, also near the culvert, but neither species is common; 11 Jul 1882, 21 Jun 1887 & 1888, 22 Jun 1889; University Farm Sep & Oct 1887, 4, 12, 24 Nov 1888); Selby & Craig 1890:9 (introduced).

HERBARIUM RECORDS: Jun 1888—Cols., Craig; 2 Jul 1890—Cols., E. V. Wilcax; 7 Aug 1890—St. Marys School, Cols., Selby (OS, WOOS); 8 Jul 1892—Cols., Bogue; 13 Sep 1895—Cols., Osburn; Aug 1899—Groveport, Helfrich; Summer 1938—OSU Botanical Garden, C. Jones; 3 Jun 1982—Blendon Woods, Owens; 7 Jun 1987—Highbanks Metro Park (Delaware Co.), field, S of Powell Rd., Morawetz 47; 19 Jul 1989—Antrim Park, E of Rt. 315 and N of Bethel Rd., Cols., Sharon Twp., Lowden 4223.

# 2. \*Melilotus officinalis (L.) Pall.

Yellow Sweet Clover, Yellow Melilot

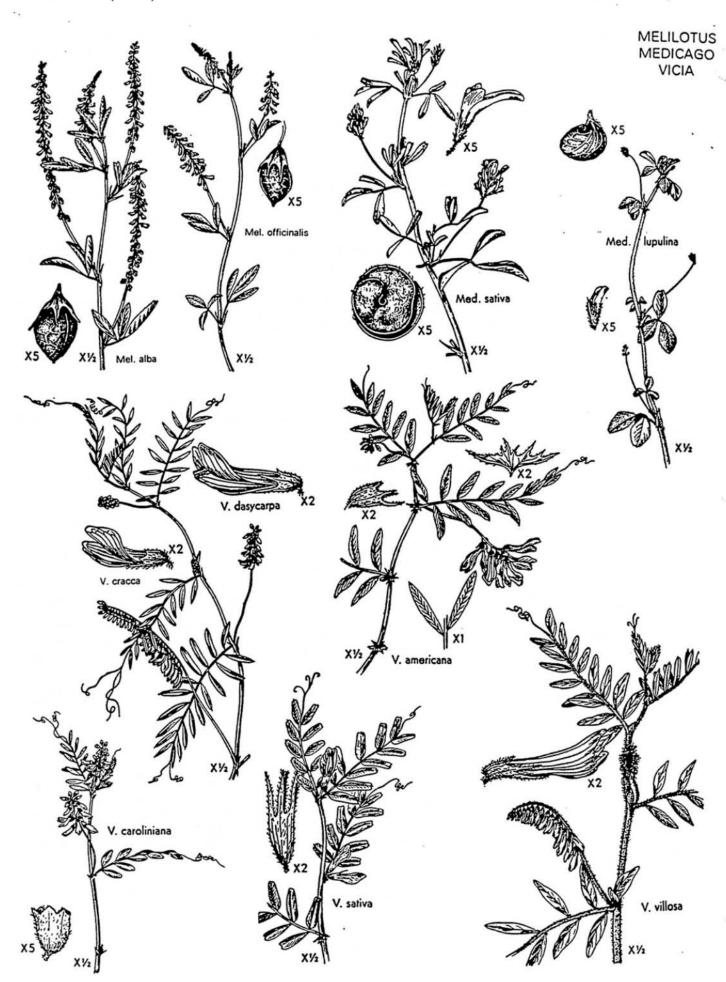
Naturalized (native of Eurasia)

Similar to Melilotus alba except for corolla yellow, 5-6 mm long; fruit cross-ribbed.

REFERENCES: Craig 1890:53, 75 (near the causeway and N along the lagoon, 11 Jun 1887, 25 Jun 1888, 4 Jun 1889, University Farm Sep 1887); Selby & Craig 1890:9 (introduced).

HERBARIUM RECORDS: 13 Jul 1892—Cols., W. Kellerman; 13 Jul 1892—Cols., Bogue; 23 May 1896—Worthington, M. Wright; 30 May 1896—Cols., McCall; 7 Jun 1923—Westerville, fields & roadsides, Bonnell; Summer 1938—OSU Botanical Gardens, C. Jones; 19 May 1970—Michigan Ave. & W. 1st., Boone 157; 3 Jun 1982—Blendon Woods, Owens (mounted with Melilotus alba); 21 May 1986—Park of Roses, Cols., Blanco; 31 May 1986—Highbanks Metro Park (Delaware Co.), field, Morawetz; 25 May 1988—corner of Arcadia & N. High St., ¼ mi. up creek bed, Kelly 28; 29 May 1989—Walnut Grove Cemetery, S. Worthington, Sharon Twp., Lowden 4100; 19 Jul 1989—Antrim Park, E of Rt. 315 & N of Bethel Rd., N. Cols., Sharon Twp., Lowden 4222; 24 May 1990—Dublin, Riverview St., W bank of Scioto R., ½ mi. S of Rt. 161 off Dublin Rd., Washington Twp., Lowden 4348.

#### 12. MEDICAGO L.



Herbs; leaves pinnately 3-foliolate, leaflets serrulate, terminal one stalked; stipules partly adnate to petiole; flowers in axillary globose or short-cylindric spikes or racemes; stamens diadelphous; fruit coiled, usually indehiscent; seeds 1-few.

- a Corolla blue, violet, white, or yellow, 7-12 mm long; perennial; stems erect; leaflets 2 or more times as long as wide. 1. M. sativa
- a' Corolla yellow, 2-4 mm long; annual; prostrate or ascending; leaflets obovate, to 1.5 times as long as wide. 2. M. lupulina

# 1. \*Medicago sativa L.

Alfalfa, Lucerne

Naturalized (native of the Old World)

Herb, stems erect; leaves 3-foliolate; leaflets serrulate, 2 or more times as long as wide; flowers in head-like racemes, subglobose to short-cylindric; corolla blue, violet, white or yellow, 7-12 mm long; fruit coiled, finely hairy. REFERENCES: Craig 1890:76 (a few specimens were found last summer along the road from Neil Ave. to Mr. Green's house, they had escaped from cultivation and are becoming established, as I found them again this spring, 25 Jun 1888); Selby & Craig 1890:9 (introduced). HERBARIUM RECORDS: 18 Aug 1882—University Gardens, Cols., coll.?; Jul 1888—Cols., Craig; 4 Jul 1892—Cols., Bogue; 3 Jul 1897—Cols., Osburn; 15 Jul 1899—Cols., Helfrich; 21 Jul 1986—Highbanks Metro Park (Delaware Co.), field, Watts 337 (OS, OWU); 10 Jul 1990—Lazelle Rd., open field, ½ mi. W of intersection with Worthington-Galena Rd., Sharon Twp., Lowden 4440.

# 2. \*Medicago lupulina L.

Hop Medick, Black Medick

Naturalized (native of Eurasia)

Herb, prostrate or ascending; leaves 3-foliolate; leaflets obovate, serrulate; stipules partly adnate to petiole; flowers in short-cylindric head-like racemes; corolla yellow, 2-4 mm long; fruit curved, reniform.

REFERENCES: Craig 1890:76 (on the campus SW of the college bldg., back of the chemical laboratory and elsewhere, but it is not common though it is spreading rapidly, 1 Jun 1882, 25 May 1887, 12 Jun 1888, 8 Jun 1889); Selby & Craig 1890:9 (introduced).

HERBARIUM RECORDS: 30 Jun 1890—Neils Run, Cols., coll.?; 2 Jul 1890—near Cols., W. Green; 4 Oct 1890—Central College, E. V. Wilcox; 7 Jul 1892—Cols., Bogue; 8 Jul 1901—OSU campus, Cols., Minns; 25 May [ca. 1920s]—Westerville, waste places, V. Johnson; 9 Jun 1927—Park St., Westerville, Burchard; 30 Jun 1968—NE corner of Thoburn Rd. & Dublin Rd. intersection, Moser; 9 May 1970—Charing Dr., Upper Arlington, Boone 129; 3 Jun 1982—Blendon Woods, Owens; 2 Jun 1985—OSU West Campus, Cols., Cho 44; 31 May 1986—Highbanks Metro Park (Delaware Co.), field, Morawetz; 10 Jun 1986—OSU Campus, banks of the Olentangy R., E.King 2; 31 May 1987—Highbanks Metro Park (Delaware Co.), talking rock fields, Higgins; 9 Jun 1988—Franklinton Cemetery, River St., SW Cols. Quad., Cusick 27483; 4 Jun 1989—E side of Olentangy River Rd. S of Henderson Rd., Cols., Clinton Twp., Lowden 4097; 6 Jun 1989—Turkey Run, between Olentangy River Rd. & Pegg Ave., just S of Highland Dr. (S of Henderson Rd.), Clinton Twp., Cols., Lowden 4122; 14 Jun 1989—OSU Campus, near B&Z Bldg., 1735 Neil Ave., Cols., Lowden 4151.

### 13. VICIA L. Vetch

Herbs, sometimes somewhat vinelike; leaves pinnately compound, usually with terminal tendrils; stipules half-sagittate; flowers 1 or 2 in axils or in axillary racemes; calyx irregular or almost regular, sometimes gibbous; stamens diadelphous; fruits dehiscent, 2-many-seeded.

- a Flowers solitary or 2-3 together, sessile or short-peduncled. 1. V. sativa
- a' Flowers in peduncled spikes or racemes or, if solitary, then long-peduncled.
  - b Calyx teeth about equal, less than 1 mm long, about as wide as long; flowers loosely clustered in raceme; corolla white, keel tipped with blue; fruit long-beaked. 5. V. caroliniana
  - b' Calyx not regular or the teeth longer than 1 mm, some of them narrow-attenuate; racemes densely flowered.
    - c Racemes of not more than 10 flowers. 4. V. americana
    - c' Racemes of more than 10 flowers.
      - d Pedicel attached at end of calyx; blade of standard as long as claw. 6. V. cracca
      - d' Pedicel attached to lower side of calyx (calyx with sac or spur extending backward beyond pedicel attachment); blade of standard much shorter than claw.
        - e Stem spreading-pubescent, especially above; lower calyx-teeth long-hairy, 2 mm long or more.
          2. V. villosa
        - e' Stem glabrous, appressed-pubescent, or with a few spreading hairs; lower calyx-teeth rarely long-hairy, 2 mm long or less. 3. V. dasycarpa

### 1. \*Vicia sativa L.

Common Vetch

# Cultivated to Escaped (native of Europe)

Pubescent; flowers 18 mm long or more; fruit dark, pubescent, with constrictions; seeds flattened, 5 mm wide. REFERENCES: Craig 1890:76 (abundant in the grass-plot field back of the President's house where it was formerly cultivated and has now escaped, 15 Apr 1889); Selby & Craig 1890:9 (introduced).

NOTE: No specimens seen from Franklin Co. There is a Craig specimen labeled Vicia sativa that is Vicia villosa.

#### 2. \*Vicia villosa Roth

Hairy Vetch

Naturalized (native of Europe)

Herb, stems spreading-pubescent; racemes long-peduncled, with more than 10 flowers, pubescence of long spreading hairs; calyx very swollen on one side near the base, pedicel appearing ventral; lower calyx-teeth long-hairy, 2 mm long or more; corolla blue-purple; fruits glabrous.

HERBARIUM RECORDS: Jul 1888—OSU grounds, Cols., Craig; May 1891—Cols., Werner (CLM); May 1891—OSU farm, field, Morrey (CLM); 1923—near OSU, escaped from cultivation, Gordon; Summer 1938—OSU Botanical Gardens, C. Jones; 14 May 1970—W. 3rd Ave. & Olentangy Blvd., abundant on banks of new freeway, Boone 150; 1 Jun 1982—Blendon Woods, near dam, Owens.

### 3. \*Vicia dasycarpa Ten.

Woolly-pod Vetch

Naturalized (native of S Europe)

Herb, stem glabrous, appressed-pubescent, or with a few spreading hairs; racemes peduncled, with usually more than 10 flowers, pubescence short appressed or incurved hairs; calyx very swollen on one side near the base, pedicel appearing ventral; lower calyx-teeth rarely long-hairy, 2 mm long or less; corolla blue-purple; fruits pubescent to glabrous.

HERBARIUM RECORDS: 31 May [ca. 1920s]—near Westerville, dry-like places, Zinn; 25 Jun 1931—Hague Ave., columbus, Wolfe; Aug 1939—near Rome, H. Moore (BHO); 13 May 1986—Antrim Park, next to bike path near Rt. 315, Yang 152; 18 May 1986—Antrim Park, NW side of lake along wire fence next to bike path, Cols., R. Burnes 28; 24 May 1986—Worthington, slope between Rt. 161 & bike path, 100 m E of Olentangy R., S side of Rt. 161, Hollander 053; 28 May 1988—field ¼ mi. N of Bethel Rd. & Rt. 315, Cols., Kelly 42; 6 Jun 1989—Turkey Run, between Olentangy River Rd. & Pegg Ave., S of Highland Dr. (S of Henderson Rd.), Clinton Twp., Lowden 4110.

NOTE: New record for Franklin Co. This species has been confused with Vicia cracea which has the pedicel attached at the end of the very slightly gibbous based calyx and upper lobes of calyx broadly triangular.

#### 4. †Vicia americana Muhl.

American Vetch

Herb, trailing or climbing; leaves pinnately compound with terminal tendrils; stipules several-toothed; flowers 1.5 cm long or more, 2-9 in peduncled racemes; calyx irregular, lobes usually more than 1 mm long; corolla blue-purple. REFERENCES: Riddell 1834:118 (denuded river banks); Sullivant 1840:20; Selby & Craig 1890:9; Selby 1891a:111a (#204 Re-collected). HERBARIUM RECORD: 26 May 1896—Cols., E. M. Wilcox.

#### 5. Vicia caroliniana Walter

Pale Vetch, Wood Vetch

Herb, trailing or climbing; leaves pinnately compound with terminal tendrils; stipules lanceolate or half-sagittate, entire; racemes peduncled; calyx nearly regular, lobes essentially equal, broadly triangular, under 1 mm long; corolla white, keel tipped with blue; fruit long-beaked.

HERBARIUM RECORD: 1840—Cols., Sullivant.

#### 6. \*Vicia cracca L.

Bird-vetch

Naturalized (native of Eurasia & possibly NE North America)

REFERENCE: Furlow (1991).

NOTE: No specimens seen from Franklin Co. See note under Vicia dasycarpa.

#### 14. LATHYRUS L. Vetchling, Wild Pea

Climbing or trailing herbs, mostly glabrous; leaves with 1-6 pairs of leaflets and ending in simple or branched tendrils; stipules usually conspicuous; flowers usually showy, solitary or in racemes from the axils; corolla yellow, purple, or white, or of other colors in cultivated species; fruit dehiscent, 2- to many-seeded.

- a Leaflets 2-4 pairs. 1. L. palustris
- a' Leaflets 1 pair.
  - b Stem wingless. 2. L. tuberosus
  - b' Stem winged.
    - c Peduncles usually not more than 3-flowered, rarely 4; flowers fragrant; corollas of various colors.
      3. L. odoratus

c' Peduncles 4-10-flowered; flowers odorless; corolla pink to white. 4. L. latifolius

1. Lathyrus palustris L.

Marsh-pea

Herb, climbing; stems winged or wingless; leaves with terminal tendrils; leaflets usually 4-6, sometimes 8; stipules asymmetrical, laterally attached, much smaller than leaflets, with 1 basal lobe; racemes 2-6 flowered; peduncles nearly as long as to longer than subtending leaves; corolla red-purple (whitish).

REFERENCES: Riddell 1836:7 (near Worthington, Paddock; wet prairie 2 mi. S of Cols.); Sullivant 1840:19; Selby & Craig 1890:9.

HERBARIUM RECORDS: [ca. 1834]—Cols., Lapham (CINC); 1840—Cols., Sullivant; 3 Jun 1929—Prairie Twp., Gordon.

# 2. \*Lathyrus tuberosus L.

**Tuberous Vetchling** 

Naturalized (native of Europe & W Asia)

Herb, with rhizome bearing small tubers; stems angled, wingless; leaves with terminal tendrils; leaflets 2, oblanceolate to elliptic; stipules lanceolate, with a single basal lobe; peduncles 5-8 cm long; raceme crowded with 2-10 red-purple flowers.

HERBARIUM RECORD: 1 Jun 1977—Marble Cliff Quarry at Trabue Rd., large colony found on ridge of piled limestone gravel, petals dark pink, few plants in flower, Cols., W. Carr 287.

# 3. \*Lathyrus odoratus L.

Sweet Pea

Adventive (introduced from S Europe)

REFERENCE: Furlow (1991).

NOTE: No specimens seen from Franklin Co.

### 4. \*Lathyrus latifolius L.

**Everlasting Pea** 

Naturalized (native of S Europe)

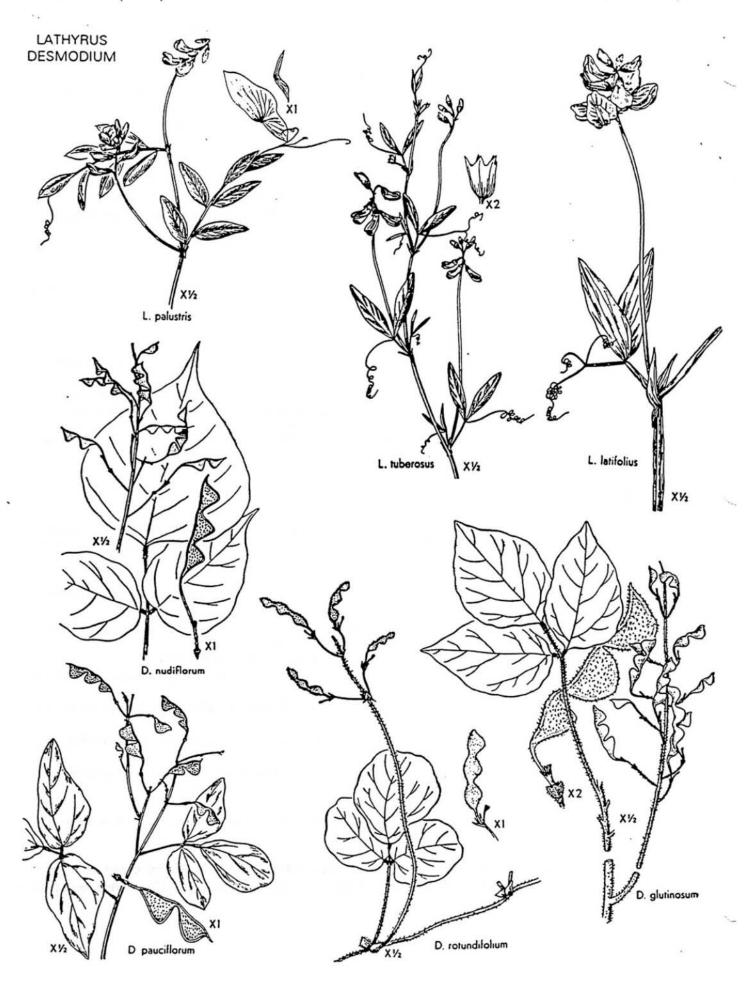
Herb, trailing or climbing; stems winged; leaves with terminal tendrils; leaflets 1 pair; peduncles 4-10 flowered; calyx lobes unequal, the lower twice as long as the upper; corolla zygomorphic, pink to white; fruits glabrous. HERBARIUM RECORDS: 10 Jul 1920—near Cols., escaped along road, white & pink flowered forms, J. H. Schaffner; 23 May 1977—alley between 12th Ave. & 13th Ave., just E of High St., Cols., W. Carr 240; 24 Aug 1989—SE corner of Morse Rd. & Indianola Ave. intersection, Clinton Twp., Cols., Lowden 4286.

### 15. DESMODIUM Desv. Tick-Trefoil

Herbs; leaves 3-foliolate; stipels usually present; flowers in racemes or panicles; petals white, pink, or purple; stamens 10, remnant of column persistent in fruit; fruit a loment of 2 to several flat 1-seeded indehiscent segments, pubescent with hooked hairs.

- a Stamens monadelphous; mature loment-stipe longer than persistent stamen-column; loment deeply indented on lower margin, straight or concave on upper; woodland plants.
  - b Terminal bladelets round-ovate, abruptly long-acuminate, about as wide as long; leaves crowded at base of long terminal peduncle (rarely scattered); petals pink. 2. D. glutinosum
  - b' Terminal bladelets ovate, obovate, or rhombic, longer than wide, not strongly acuminate.
    - c Petals usually pink; flowers usually in a raceme, on scape arising from base of plant; leaves crowded at top of flowerless stem (rarely scattered). 1. D. nudiflorum
    - c' Petals white; flowers few, in short racemes terminal and rarely axillary on leafy slender erect or decumbent stems. 3. D. pauciflorum
- a' Stamens diadelphous; loment-stipe rarely as long as persistent stamen-column; loment usually indented at both margins, sometimes not equally; stem leafy.
  - d Stems prostrate; bladelets almost circular; stipules to 12 mm long, ovate, persistent; flowers about 1 cm long, floral bracts conspicuous. 4. D. rotundifolium
  - d' Stems erect or ascending.
    - e Stipules 3 mm wide or more, slightly cordate or clasping; flowers about 1 cm long; loment-segments 3-6.

      5. D. canescens
    - e' Stipules narrower than above, often early deciduous.
      - Flowers 3-6 mm long; loment-segments 1-3, almost circular, upper edge often thickened; bladelets 3 cm long or less, length no more than twice width, rounded at apex, or, if to 5 (7) cm long, then firm and strongly reticulate.



- Terminal bladelet to 5 cm long or more, lanceolate, firm, strongly reticulate, pilose beneath; rare.
   D. rigidum
- g' Terminal bladelet 3 cm long or less, half as wide or more, apex blunt.
  - h Bladelets pilose above, less so beneath; petioles mostly 0.5 to 1 cm long, densely long-pilose.
    8. D. ciliare
  - h' Bladelets almost glabrous above, somewhat pilose and paler beneath; petioles usually more than 1 cm long, sparsely hairy. 9. D. marilandicum
- f' Flowers 6-12 mm long; bladelets and loments not as above.
  - Bladelets velvety-villous beneath, ovate, large, acute to blunt at tip; petioles densely pilose; stipules reddish, hairy beneath, usually reflexed; petals pink, drying green; loment-segments usually angled below. 12. D. viridiflorum
  - i' Bladelets glabrous or hairy, not velvety-villous; stipules not reddish.
    - j Floral bracts conspicuous but deciduous before anthesis; stipules lanceolate, 8-17 mm long; loment-stipe usually shorter than calyx; flowers crowded.
      - k Petioles usually 4 cm long or more; terminal bladelet acuminate, ovate; loment-segments angled below; stipels long. 14. D. cuspidatum
      - k' Petioles to 2(3) cm; terminal bladelet obtuse or acute, lanceolate or lance-ovate; loment-segments rounded below. 6. D. canadense
    - j' Floral bracts small; stipules small or early deciduous; loment segments usually 3-5, angled below; flowers 6-10 mm long.
      - Bladelets glaucous beneath, ovate, mostly glabrous; stem glabrous or nearly so; lomentstipe much longer than calyx. 13. D. laevigatum
      - l' Bladelets not glaucous beneath.
        - m Terminal bladelet 3-10 times as long as wide, stem and under surface of bladelets glabrous or hairs mostly appressed. 10. D. paniculatum
        - m' Bladelets 2-3 times as long as wide, stem and under surface of bladelets hairy, some hairs spreading. 11. D. glabellum

#### 1. Desmodium nudiflorum (L.) DC.

k'

Naked Tick-trefoil

Herb, stem forked at base, one branch sterile and the other fertile; leaves 3-foliolate, crowded at top of flowerless stem; terminal leaflet elliptic to ovate, longer than wide; calyx lobes less than half as long as the tube; petals usually pink, to purple; pedicels 1-2 cm long; stamens monodelphous; upper suture of the fruit glabrous.

REFERENCES: Riddell 1834:118 (Hedysarum nudiflorum, open woods); Sullivant 1840:19; Selby & Craig 1890:9.

HERBARIUM RECORDS: 8 Aug 1890—Central College, Selby; 1 Aug 1990—Hoover Dam Park, just W of entrance off Cubbage Rd. & S of Walnut St., woods, Blendon Twp., Lowden 4485.

# 2. Desmodium glutinosum (Muhl.) A.W.Wood

Cluster-leaf Tick-trefoil

Herb; leaves 3-foliolate, clustered just at base of long terminal peduncle; terminal bladelets round-ovate, abruptly long-acuminate, about as wide as long; inflorescence terminates the leafy stem, flowers pink-purple, pedicels approx. 5-7 mm long; calyx lobes less than half as long as the tube; stamens monadelphous; upper suture of fruit glabrous. Syn.: D. acuminatum (Michx.) DC.

REFERENCES: Riddell 1834:118 (Hedysarum acuminatum, open woods); Sullivant 1840:19; Selby & Craig 1890:9.

HERBARIUM RECORDS: 11 Aug 1890—Neil's Run, Cols., Selby; 7 Sep 1890—Lake Park, Cols., Selby; Jul 1892—Franklin Co., Bogue; 19 Jul 1956—border of woods across road from Sinclair Woods, Weishaupt; 8 Jul 1982—Blendon Woods, near Nature Center, Owens; 16 Jul 1986—Highbanks Metro Park (Delaware Co.), woods, Watts 327 (OS, OWU).

### 3. †Desmodium pauciflorum (Nutt.) DC.

Few-flowered Tick-trefoil

REFERENCES: Sullivant 1840:19; Selby & Craig 1890:9. NOTE: No specimens seen from Franklin Co.

# 4. Desmodium rotundifolium DC.

Round-leaved Tick-trefoil

Herb; stems prostrate, villous; leaflets 3-foliolate, bladelets broadly obovate, almost circular; stipules to 12 mm long, ovate-acuminate, persistent, approx. 10 mm long.

REFERENCES: Riddell 1834:118 (Hedysarum rotundifolium, [rocky situations]); Sullivant 1840:19; Selby & Craig 1890:9; Selby 1891a:111a (#183 Re-collected).

HERBARIUM RECORDS: 1 Jul 1891-Big Darby, Selby; 1 Jul 1891-Georgesville, Werner (CLM); 24 Sep 1892-Big Darby, Cols., Selby.

### 5. Desmodium canescens (L.) DC.

Hoary Tick-trefoil

Herb, spreading-hairy, stem erect, often much branched; leaves 3-foliolate, bladelets scarcely reticulate, ovate, hairy, often yellowish-green; petioles nearly as long as the lateral leaflets; stipules 3 mm wide or more, slightly cordate or clasping; flowers about 1 cm long, usually pink, drying green, in a panicle of several racemes; stamens diadelphous; loment segments longer than wide, angled below, upper suture pubescent with hooked hairs.

REFERENCES: Sullivant 1840:19; Selby & Craig 1890:9; Kellerman & Werner 1893:225 (quite common on the island).

HERBARIUM RECORDS: 12 Aug 1882—Olentangy R., OSU, W. Green; Jul 1888—Cols., Craig; 30 Jul 1888—Olentangy R., Cols., Craig; 6 Aug 1890—OSU Farm, Cols., Werner (CLM); 30 Aug 1890—OSU Farm, Cols., Selby & Werner; 7 Sep 1890—Lake Park, Cols., Selby; 27 Jul 1891—near Cols., E. V. Wilcox; 3 Sep 1892—Cols., Bogue; 30 Aug 1894—OSU Campus, cult., Cols., W. Kellerman; 16 Aug 1898—OSU Bot. Garden, cult., J. H. Schaffner; 22 Aug 1899—S Cols., Selby; 21 Jul 1986—Highbanks Metro Park (Delaware Co.), field, Watts 331 (OS, OWU); 9 Aug 1992—Griggs Reservoir, near dam, E bank of Scioto R., Perry Twp., Lowden 5018.

### 6. Desmodium canadense (L.) DC.

Canadian Tick-trefoil

Herb, stem erect; leaves 3-foliolate, terminal bladelet obtuse or acute, lanceolate or lance-ovate, appressed-hairy beneath; stipules linear-subulate, less than 3 mm wide, to 8 mm long; petioles to 2 cm long; flowers 6 or more mm long; racemes densely flowered, with conspicuous bracts; stamens diadelphous; loment-segments rounded below, upper suture pubescent with hooked hairs.

REFERENCES: Riddell 1834:118 (Hedysarum canadense, dry prairies); Sullivant 1840:19; Craig 1890:76 (very common on the island, 11 Aug 1882, 30 Jul 1887, 31 Jul 1889); Selby & Craig 1890:9.

HERBARIUM RECORDS: 1834-Worthington, J. Paddock Collection (ILL); 1840-Cols., Sullivant; 4 Oct 1890-OSU Farm, Cols., Selby.

# 7. †Desmodium rigidum (Elliott) DC.

Stiff Tick-trefoil

Syn.: D. obtusum (Muhl.) DC., Meibomia obtusa (Muhl.) Vail, M. rigida (Elliott) Kuntze
REFERENCES: Riddell 1834:118 (Hedysarum rigidum, dry prairies); Craig 1890:76 (not so common as the others, but is found on the island just
S of the road); Kellerman & Werner 1893:228; Werner 1893:93 (#182a, Georgesville, Werner).
NOTE: No specimens seen from Franklin Co.

### 8. Desmodium ciliare (Muhl.) DC.

Little-leaf Tick-trefoil

Herb; stem slender, erect; terminal leaflet not exceeding 2.5 cm long; lateral leaflets distinctly longer than petiole; bladelets pilose above, less so beneath; petiole up to 1 cm long, pilose; stipules narrow; inflorescence a large terminal panicle; flowers 4-5 mm long; loment-segments 1-3, almost circular, upper edge often thickened and covered with hooked hairs.

REFERENCE: Werner 1893:93 (#180a, Georgesville, Werner).

HERBARIUM RECORD: 29 Aug 1892-Georgesville, Werner (CLM, OS).

NOTE: Reported by Weishaupt 1971:139 for Ohio; Furlow (1991) cited it as a synonym of Desmodium obtusum (Muhl.) DC., which is considered a synonym of Desmodium rigidum (Elliott) DC.

#### 9. Desmodium marilandicum (L.) DC.

Maryland Tick-trefoil

REFERENCES: Sullivant 1840:19; Selby & Craig 1890:9.

NOTE: No specimens seen from Franklin Co.

#### 10. Desmodium paniculatum (L.) DC. var. paniculatum

Tick-trefoil

Similar to *Desmodium paniculatum* var. *dillenii* except stems are glabrous to slightly pubescent; terminal leaflet more than 3 times as long as wide with appressed hairs on the undersurface of bladelets.

REFERENCES: Riddell 1834:118 (Hedysarum paniculatum, dry prairies); Sullivant 1840:19; Selby & Craig 1890:9.

HERBARIUM RECORDS: 1837—Cols., I. G. Jones, J. Paddock Collection (ILL); 1840—Cols., Sullivant; 1890—Franklin Co., Selby; 4 Oct 1890—E of Westerville, woods, Selby; 7 Sep 1898—Cols., W. Kellerman; 20 Aug 1899—Scioto R., Cols., Selby; 7 & 9 Sep 1899—Worthington, Selby; 17 Jul 1982—Blendon Woods, Owens; 16 Aug 1987—Highbanks Metro Park (Delaware Co.), open field, Witsberger 957; 3 Aug 1990—McOwen Rd. just W of Dixon Rd. (Franklin/Licking Co. Line), open woody area S side of McOwen Rd., Jefferson Twp., Lowden 4504.

#### 11. †Desmodium glabellum (Michx.) DC.

Tick-trefoil

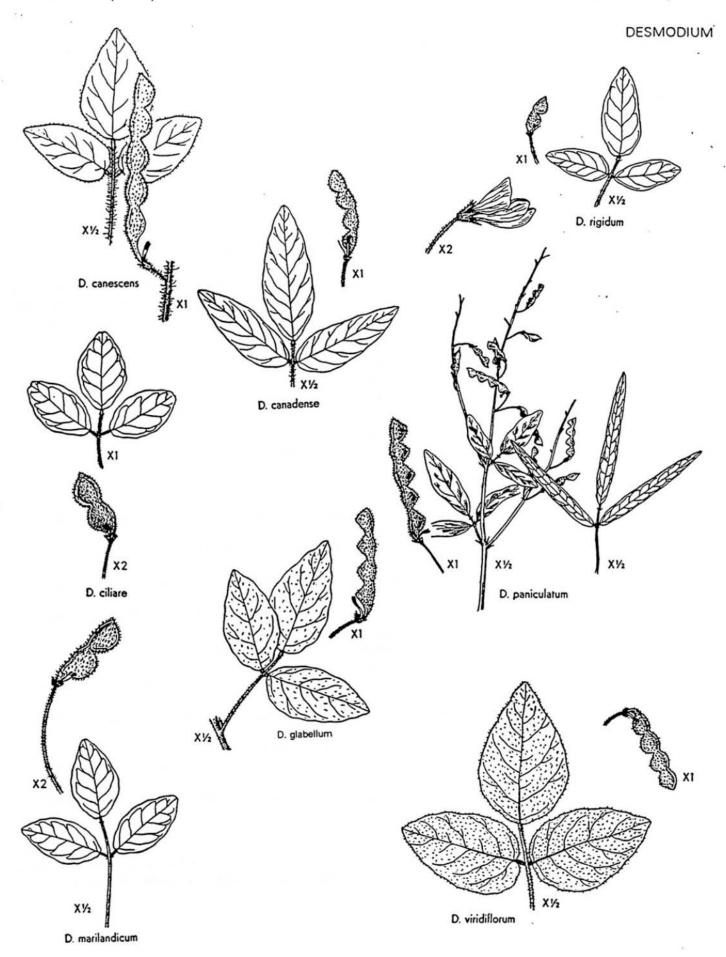
Herb; stem erect, spreading-hairy; leaves 3-foliolate, leaflets 2-3 times as long as wide, hairy beneath with some hairs spreading; stipules narrow; flowers approx. 6 mm long, floral bracts small; stamens diadelphous; upper suture of fruit pubescent with hooked hairs, loment segments angled below. Syn.: D. dillenii Darl., D. paniculatum (L.) DC. var. dillenii (Darl.) Isely

REFERENCES: Sullivant 1840:19; Selby & Craig 1890:9.

HERBARIUM RECORD: 1889-OSU, Cols., Craig.

#### 12. Desmodium viridiflorum (L.) DC.

Velvety Tick-trefoil



Herb; stems erect, finely pubescent; leaves 3-foliolate, terminal leaflet ovate, acute to blunt at tip; bladelets velvetyvillous beneath; stipules narrow, reddish.

REFERENCES: Craig 1890:76 (grows on the island); Kellerman & Werner 1893:225.

HERBARIUM RECORD: Jul 1888-Cols., Craig.

NOTE: Specimen immature, but essentially appears to be this species.

#### 13. †Desmodium laevigatum (Nutt.) DC.

Smooth Tick-trefoil REFERENCE: Riddell 1834:118 (Hedysarum laevigatum, open woods).

NOTE: No specimens seen from Franklin Co.

### 14. Desmodium cuspidatum (Muhl.) Loudon

Big Tick-trefoil

Syn.: D. bracteosum (Michx.) DC.

REFERENCES: Sullivant 1840:19; Selby & Craig 1890:9.

NOTE: No specimens seen from Franklin Co.

### 16. LESPEDEZA Michx. Lespedeza, Bush-clover

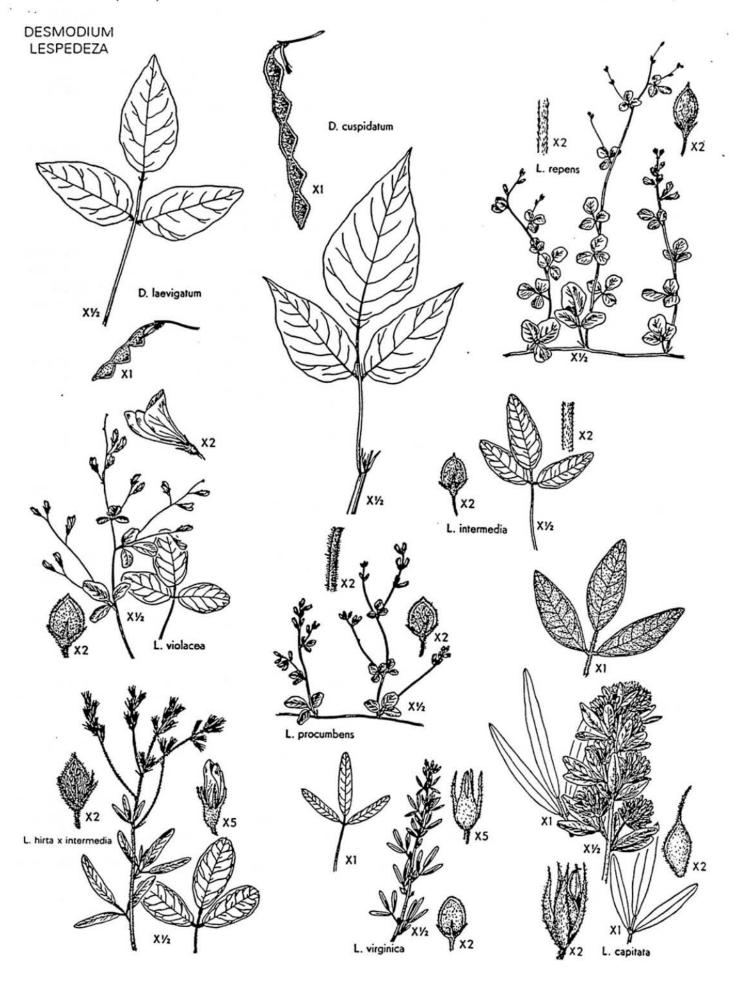
Herbs and shrubs; leaves rather small, 3-foliolate, leaflets without stipels; flowers usually small, solitary or in spikes, heads or racemes; corolla purple, white, or yellowish, or flowers apetalous, in separate clusters or mixed with those with petals, fruits forming in both; stamens diadelphous; fruit flattened, ovate, acuminate, indehiscent, 1-seeded.

- Stipules wide, striate; lateral veins of leaflets parallel, ending at margin.
  - Hairs of stem downwardly appressed. 9. L. striata
  - b' Hairs of stem upwardly appressed. 10. L. stipulacea
- a' Stipules subulate; lateral veins of leaflets usually anastomosing.
  - c Stems trailing.
    - d Pubescence of stem spreading. 2. L. procumbens
    - d' Pubescence of stem appressed or stem glabrous. 1. L. repens
  - c' Stems erect or ascending.
    - e Flowers in dense spikes or heads; corolla yellowish-white with purple spot on standard; calyx as long as fruit or longer.
      - Spikes usually shorter than peduncles; calyx and fruit about equal; length of leaflets less than twice width. 7. L. hirta
      - f' Spikes dense, headlike, usually longer than peduncles; calyx longer than fruit; length of leaflets more than twice width. 6. L. capitata
    - e' Flowers not in dense heads or spikes; corolla purple, pink, or white lined with purple; calyx shorter than fruit.
      - Leaflets cuneate at base, truncate or retuse and mucronate at tip; flowers axillary, solitary or 2-3 together; corolla white with purple veins. 8. L. cuneata
      - g' Leaflets not cuneate at base; flowers purple, in several-flowered racemes.
        - h Peduncles mostly longer than subtending leaves.
          - Stem not or little branched, hairs spreading; racemes closely several-flowered. L. × nuttallii Darl. (L. hirta × intermedia)
          - Stem bushy-branched, glabrous or hairs appressed; racemes loosely few-flowered. 3. L. violacea
        - h' Flower-clusters sessile or peduncles mostly shorter than subtending leaves.
          - Leaflets more than twice as long as wide; clusters of petaliferous flowers sessile or nearly so.
          - Leaflets less than twice as long as wide; clusters of petaliferous flowers often short-stalked. 5. L. intermedia

#### 1. Lespedeza repens (L.) Barton

Smooth Trailing Lespedeza

Herb; stems trailing or procumbent; plants glabrous or stems, leaflets and petioles with appressed pubescence; leaflets mostly 1-2 cm long, half as wide; stipules subulate; peduncles much exceeding the subtending leaves; corolla purple.



HERBARIUM RECORDS: Sep 1890—Cols., Werner (CLM); 4 Sep 1890—Central College, Selby; Sep 1892—Cols., Werner (BGSU, CLM); 24 Sep 1892—Georgesville, Werner; 4 Sep 1936—N of Dublin, Gordon.

### 2. Lespedeza procumbens Michx.

Downy Trailing Lespedeza

Herb; stems trailing or procumbent; pubescence of stems, leaflets and petioles spreading; leaflets 1-2 cm long, half as wide; stipules subulate; peduncles much exceeding the subtending leaves bearing a loose raceme of purple flowers. REFERENCES: Sullivant 1840:19; Craig 1890:76 (along the river in the NW corner of the farm and N of the dike); Selby & Craig 1890:9. HERBARIUM RECORD: 3 Oct 1891—Big Darby, Selby.

### Lespedeza violacea (L.) Pers.

Violet Lespedeza

Herb, ascending to erect, stem bushy-branched, glabrous or hairs appressed; stipules subulate; racemes closely several-flowered; peduncles of the petaliferous racemes evidently longer than the subtending leaves.

REFERENCES: Riddell 1834:118 (dry prairies; & Lespedeza divergens, dry prairies, probably belongs here); Sullivant 1840:19; Selby 1891a:111a. HERBARIUM RECORDS: 1840—Cols., Sullivant; Sep 1890—Central College, Selby; 4 Aug 189—Central College, Cols., Selby; Sep 1890—Central College, Selby; 4 Sep 1890—near Cols., Selby; 5 Sep 1890—Central College, E. V. Wilcox: 15 Sep 1890—Central College, E. V. Wilcox.

# 4. Lespedeza virginica (L.) Britton

Virginia Lespedeza

Herb, stems erect or ascending; simple or virgately branched above; leaflets oblong or linear-oblong, 3-7 mm wide, 4-6 times as long, short-strigose on both sides (or rarely glabrous above); stipules subulate; flowers purple, the apetalous ones chiefly along the middle of the stem in subsessile clusters, the others in short-few-flowered racemes from the upper axils.

REFERENCES: Riddell 1834:118 (Lespedeza angustifolia, dry prairies); Riddell 1835:24 (Lespedeza angustifolia, Cols., open woods & dry prairies); Sullivant 1840:19 (Lespedeza reticulata Pers.); Selby & Craig 1890:9 (Lespedeza reticulata Pers.).

HERBARIUM RECORDS: 1840—Cols., Sullivani; Sep 1890—Central College, Selby; 4 Sep 1890—Central College, Selby (a mixed collection filed with Lespedeza intermedia); 3 Oct 1891—Big Darby, Cols., Selby; 10 Oct 1891—Georgesville, Werner (CLM, OS); Aug 1892—Georgesville, Werner (CLM); 29 Aug 1892—Georgesville, Werner, 29 Aug 1892—Georgesville, Bogue; 24 Sep 1892—Big Darby, Cols., Selby; 29 Oct 1892—Georgesville, Werner (CLM); 31 Aug 1982—Blendon Woods, Owens; 3 Sep 1992—W side of Cubbage Rd., approx. ½ mi. S of Walnut St., rare in dry openings in brushy field, Blendon Twp., New Albany Quad., McCormac 4905.

NOTE: Lespedeza angustifolia (Pursh) Elliott is not in Ohio; I believe Riddell's Lespedeza angustifolia applies to Lespedeza virginica based on 2 specimens of Selby's labeled as such from Big Darby (3 Oct 1891 & 24 Sep 1892). Based on Sullivant's and Werner's specimen labels, as well as others, I have placed Lespedeza reticulata here.

#### 5. Lespedeza intermedia (S.Watson) Britton

Wand-lespedeza

Much like Lespedeza virginica except stems usually virgately branched above; leaves generally spreading; leaflets elliptic, 6-20 mm wide, 1.5-3.0 times as long, strigose beneath, usually glabrous above; stipules subulate; flowering much like Lespedeza virginica.

REFERENCES: Sullivant 1840:19 (Lespedeza sessiliflora Nutt.); Selby & Craig 1890:9 (Lespedeza stuvei Nutt. var. intermedia S.Watson).

HERBARIUM RECORDS: [ca. 1830s]—Worthington, Dr. Paddock (URB); Sep 1890—near Cols., Selby; Sep 1890—Cols., Werner (CLM); Sep 1890—Central College, Cols., Selby; 4 Sep 1890—Central College, Selby; 7 Sep 1890—Central College, Cols., Selby; 24 Sep 1892—Cols., Selby; 26 Sep 1903—Central College, Jennings.

NOTE: Sullivant's reference to Lespedeza sessiliflora is placed here based on the Paddock specimen from Worthington at Urbana University. Also the reference to Lespedeza stuvei var. intermedia is placed here based on specimens identified as Lespedeza intermedia that were labelled with this name.

# Lespedeza capitata Michx.

Bush-clover

Herb, stems erect; leaves variable in shape and pubescence, length of leaflets more than twice width; stipules subulate; flowers in dense head-like spikes, longer than peduncles; calyx lobes separate, longer than the pubescent fruits; corolla yellowish-white with a purple spot on the standard.

REFERENCES: Riddell 1834:118 (dry prairies); Selby 1891a:111a.

HERBARIUM RECORDS: 1834—Scott's Plains, J. Paddock Collection (ILL); 1840—Cols., Sullivant; 3 Oct 1891—Big Darby, Cols., Selby (OS, WOOS); 10 Oct 1891—Georgesville, Werner (CLM); 24 Sep 1892—Georgesville, Cols., Selby; 28 Aug 1892—Franklin Co., Bogue; 29 Aug 1892—Georgesville, Bogue.

### 7. Lespedeza hirta (L.) Hornem.

Hairy Lespedeza

Herb, stems erect; leaflets oval to obovate, length less than twice width; stipules subulate; inflorescence spicate, dense; peduncle usually longer than inflorescence; calyx reaching 7.0 mm long, densely hairy; corolla yellowish-white; calyx and fruit about equal.

REFERENCES: Riddell 1834:118 (Lespedeza polystachia, dry prairies); Sullivant 1840:19 (Lespedeza polystachya Michx.); Selby & Craig 1890:9 (Lespedeza polystacha Michx.).

HERBARIUM RECORD: 1840-Cols., Sullivant.

NOTE: Based on the Sullivant specimen label, I have placed Lespedeza polystachia here.

Manual of the Vascular Plants of Franklin County Richard M. Lowden (1997) The Ohio State University Herbarium Columbus, Ohio

8. \*Lespedeza cuneata (Dum.Cours.) G.Don

Chinese Lespedeza, Sericea Lespedeza

Naturalized (native of E Asia)

Herb, stems erect, somewhat woody; leaflets linear, ascending or erect, cuneate at base, truncate and mucronate at tip; stipules subulate; flowers axillary, 7-9 mm long, solitary, or 2-3 together; corolla white with purple veins. HERBARIUM RECORDS: 10 Oct 1941—OSU Farm, Waller, 7 Sep 1982—Blendon Woods, Owens; 20 Sep 1987—Highbanks Metro Park (Delaware Co.), field, Morawetz; 16 Sep 1990—Highbanks Metro Park (Delaware Co.), S end of River Trail, ½ mi. S of Powell Rd., Watts 530 (OS, OWU); 30 Sep 1991—Lower Scioto Park, entrance off Whittier St., E side of Scioto R., just N of Greenlawn Ave. bridge, Marion Twp., Lowden 4867.

9. \*Lespedeza striata (Thunb.) Hook. & Arn.

Common Lespedeza, Japanese Clover

Naturalized (native of E Asia)

Herb, erect or diffuse, much branched; stem pubescence downwardly appressed; leaflets oblong-obovate, veins parallel; stipules lance-ovate, brown, scarious, striate, many-nerved; flowers pink or purple, 1-3 in upper axils. HERBARIUM RECORDS: Jun 1888—Cols., Craig; 30 Sep 1925—Franklin Co., D. Williams.

10. \*Lespedeza stipulacea Maxim.

Korean Clover

Naturalized (native of E Asia)

Similar to Lespedeza striata except for hairs of stem upwardly appressed.

HERBARIUM RECORD: 3 Sep 1992—Cubbage Rd., approx. ½ mi. S of Walnut St., locally common roadside weed, Blendon Twp., New Albany Quad., McCormac 4904.

#### 17. AMORPHA L.

Shrub; leaves odd-pinnate, leaflets many, entire, 2-4 cm long, gland-dotted; flowers small, in dense panicled racemes; petal 1, the standard, purple, folded around stamens and style; stamens 10, separate above, monadelphous at base; fruit oblong, gland-dotted, 1-2-seeded.

1. †Amorpha fruticosa L.

False Indigo

Shrub, approx. 3 m high; leaves pinnately compound; pinnae cuspidate at tips and gland-dotted beneath; racemes 2-several, rarely one; calyx tube usually strongly glandular, upper 4 lobes shorter, the lowest one longer and more narrow; petal 1, the standard, dark purple; stamens 10, exserted; anthers orange; legume strongly glandular, upper margin bulged upward.

HERBARIUM RECORDS: Jun 1888—Cols., Craig; 18 Jun 1890—State Fair Grounds, Cols., Bogue; 9 Jun 1978—W bank of Olentangy R., OSU Campus at 12th Ave., Marshall, Bartolotta & W. Carr 948; 1 Jun 1980—along E bank of Scioto R., just S of I-70 bridges, SW Cols. Quad., W. Carr 2849; 26 May 1987—OSU Campus, along the Olentangy R., between 12th Ave. & Clinic Dr., Jen 63; 29 May 1988—OSU Campus, W bank of Olentangy R., between the Lane Ave. bridge & the Fawcett Center for Tomorrow, Cols., T. Lammers 6229 (MU, OS); 10 Jun 1991—banks of Scioto R., above Greenlawn Ave. dam, SW Cols. Quad., Cusick 29637; 5 Jul 1991—OSU Campus, E Bank of Olentangy R., between Lane Ave. & King Ave., Clinton Twp., Cols., Lowden 4769 (in fruit) & 4770; 31 May 1993—Scioto Blvd., Lou Berliner Park, W bank of Scioto R., just N of Greenlawn Ave. bridge, Franklin Twp., Lowden 5062.

NOTE: Not mapped for Franklin Co. by Braun 1961:227 (illus. p. 228).

#### 18. ORBEXILUM Raf.

Herbs; leaves more or less gland-dotted, pinnately 3-foliolate; flowers in spikes or racemes, corolla blue or purple to white; stamens diadelphous or monadelphous; fruit ovoid; indehiscent. (often incl. in *Psoralea L.*)

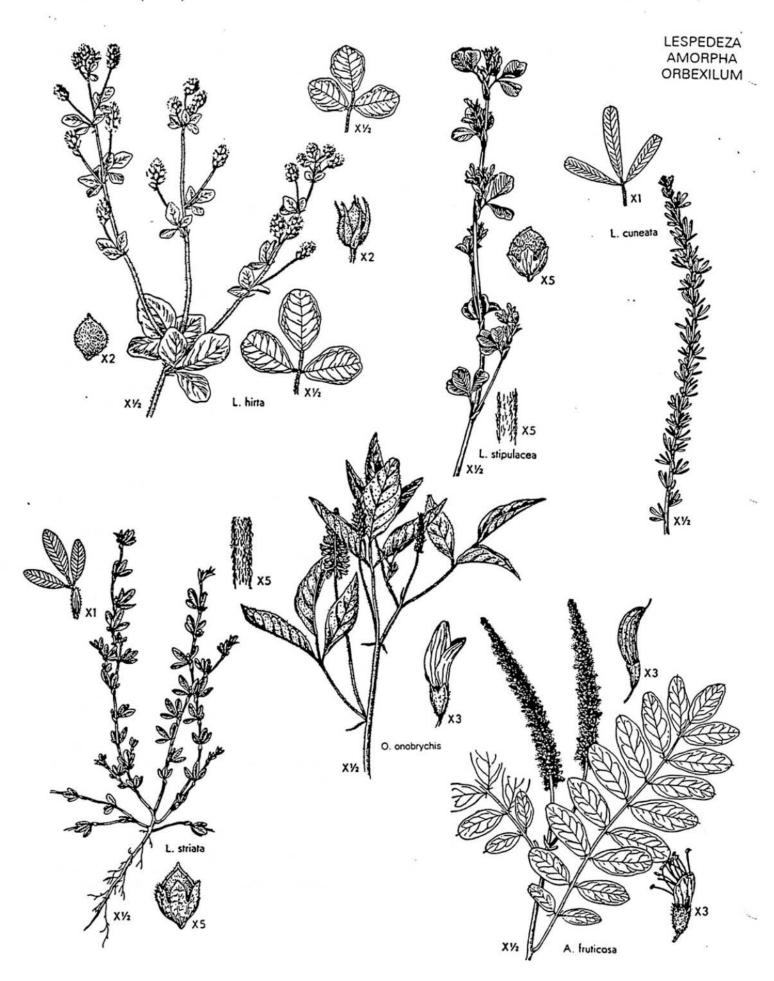
1. Orbexilum onobrychis (Nutt.) Rydb.

Scurf-pea

Herb; leaves pinnately 3-foliolate, gland-dotted above, principal leaflets more than 2.5 cm wide, ovate-lanceolate, acuminate; flowers in elongated axillary racemes; corolla blue, varying to white; peduncles equaling or shorter than subtending leaves; calyx minutely hairy or glabrate; fruits flattened, ovate, cross-wrinkled. Syn.: *Psoralea onobrychis* Nutt.

REFERENCES: Riddell 1836:7 (Psoralea latifolia Torr., Franklin Co., Lapham); Sullivant 1840:20; Craig 1890:76 (abundant in the woods S of the dike); Selby & Craig 1890:9; Selby 1891a:111a (#195 Re-collected).

HERBARIUM RECORDS: 1840—Cols., Sullivant; 20 Jul 1882—Olentangy R., W. Green; Jul 1891—Georgesville, E. M. Wilcox; 1 Jul 1891—Franklin Co., Werner (CLM); 1 Jul 1891—near RR off National Pike from Rome, Selby (WOOS); 1 Jul 1891—Georgesville, Werner (CLM, OS); 1 Jul 1891—toward Georgesville & Georgesville, Cols., Selby; 15 Jul 1892—Georgesville, Bogue; 30 Jun 1920—near Rome, B. Taylor.



# 19. CLITORIA L. Butterfly-pea

Glabrous erect or twining herb; leaves pinnate; stipules subulate; leaflets 3, ovate to ovate-lanceolate, with stipels; flowers 4-6 cm long, axillary, solitary or 2 together on a peduncle, each with 2 bractlets; corolla pale blue; standard much longer than remainder of corolla; keel shorter than wings, coherent with them, incurved; stamens monadelphous below; legume stipitate, several-seeded.

#### 1. †Clitoria mariana L.

Butterfly-pea.

REFERENCE: Riddell 1834:118 (open woods). NOTE: No specimens seen from Franklin Co.

### 20. APIOS Fabr. Ground-nut

Twining herbs; rhizomes with tubers; leaves pinnate, stipules small, leaflets 5-7, ovate to lanceolate, acute or acuminate, stipels obscure; flowers 1 cm or more long, bracted, in axillary peduncled racemes; upper lobes of calyx minute, lowest lobe longest; corolla brown-purple, keel strongly incurved; stamens diadelphous; fruit several-seeded.

### 1. Apios americana Medik.

Common Ground-nut

Herb, stems twining, rhizome bearing tubers; leaves pinnately compound; leaflets 5-7, lanceolate to ovate; stipules minute; racemes short; calyx-tube broadly hemispheric, 4 upper lobes obsolete, the lower one lance-triangular; corolla brown-purple, standard broader than long, rounded at summit; stamens 10; fruit 5-10 cm long. Syn.: A. tuberosa Moench

REFERENCES: Riddell 1834:118 (bottomland); Sullivant 1840:19; Selby & Craig 1890:9; Selby 1891a:111a (#165 Re-collected). HERBARIUM RECORDS: 1840—Cols., Sullivant; 20 Apr 1902—Simpson's Prairie, tubers from muck swamp, coll.?

# 21. AMPHICARPAEA Elliott Hog-peanut

Slender twining herb; leaves pinnate; leaflets 3, ovate, with stipels; flowers without corolla or with small corolla present near base of plant in addition to petaliferous flowers in axillary racemes or panicles from upper part of plant; corolla pale purple to white, small, each pedicel bracted; pods from upper flowers usually 3-seeded, those at base of plant or below ground usually 1-seeded.

#### 1. Amphicarpaea bracteata (L.) Fernald

Hog-peanut

Herb, stem often twining; leaves 3-foliolate; leaflets acute, entire, with stipels; flowers in short racemes; pedicels subtended by wide striate bracts with truncate summit; racemes short, dense; corolla zygomorphic, pale purple to whitish; styles glabrous except sometimes at base; legume flat, oblong, pointed at both ends, mostly 3-seeded. Syn.: A. monoica L.

REFERENCES: Sullivant 1840:18; Craig 1890:76 (In the SW part of the island; rather common, climbing upon the surrounding plants); Selby & Craig 1890:9.

HERBARIUM RECORDS: 11 Aug 1882—Neils Run, Cols., W. Green; 1890?—Indianola Place, Cols., Selby; 17 Aug 1890—Georgesville, Bogue; 7 Sep 1890—Lake Park, Cols., Selby; 20 Aug 1892—Cols., Bogue; 23 Aug 1899—Scioto R., Cols., Selby; 7 Sep 1899—Worthington, Selby; 20 Oct 1934—Bexley, beech woods, Gordon & J. H. Schaffner; 28 Aug 1982—Blendon Woods, Owens; May 1986—Highbanks Metro Park (Delaware Co.), Watts; 22 Aug 1986—Highbanks Metro Park (Delaware Co.), woods, Watts 345 (OWU). NOTE: Specimens are highly variable in pubescence (Cronquist, p. 305), but scarcely divisible into vars.

# ELAEAGNACEAE, Oleaster Family

Shrubs; stems and simple entire leaves covered with silvery or golden-brown scales; flowers perigynous, monosporangiate or bisporangiate, in small lateral clusters; hypanthium of carpellate and bisporangiate flowers tubular; calyx regular, sepals 4; petals none; carpel and ovule 1; fruit covered by persistent base of hypanthium, hence appearing drupelike.

### 1. ELAEAGNUS L. Oleaster

