#### 2. JUSTICIA L. Water-willow

Growing in colonies in wet soil or in water; stem glabrous; blades lanceolate or narrower, tapering to base, sessile or subsessile, glabrous; flowers in crowded spikes or heads on long peduncles from upper axils; corolla white to pale violet, 2-lipped, lower lip spotted with dark purple; stamens 2, anthers with one pollen sac horizontal; capsule clavate.

### 1. Justicia americana (L.) M. Vahl

American Water-willow

Plants emergent, stoloniferous; stems and leaves glabrous; leaves opposite, linear to lanceolate; flowers in dense head-like spikes borne on axillary peduncles; corolla zygomorphic, 2-lipped, whitish with rose-purple markings; stamens 2. Syn.: Dianthera americana L.

REFERENCES: Riddell 1834:157 (Justicia pedunculosa, denuded river banks); Sullivant 1840:37 (Justicia pedunculosa Michx.); Craig 1890:95 (abundant in the water all along the river, 15 Jul 1882); Selby & Craig 1890:13; Cooperrider 1995:506 (illus. p. 508).

HERBARIUM RECORDS: Jul 1888—Cols., Craig; 1889—Alum Creek, Cols., Selby (OS, WOOS); 11 Jul 1898—Olentangy R., Cols., J. H. Schaffner, 3 Jul 1930—University Farm pond, Cols., Hicks; 11 Sep 1971—W of OSU campus, along Olentangy R. near Tower Dorms & Battelle, abundant in shallow water, Cols., Roberts 2050; 19 Jul 1977—Big Darby Creek, N of Pickaway Co. line, NW of Orient, Pleasant Twp., Cusick 17028 (KE); 4 Jul 1980—mouth of Hayden Run at entrance to Scioto R., S of Hayden Run Rd., 0.2 mi. E of jct. with Dublin Rd., NE corner of Norwich Twp., NW Cols. Quad., Shelly 53 (MU); 23 Jul 1982—OSU campus, E bank of the Olentangy R., just S of the Woody Hayes Dr. bridge, Cols., T. Lammers 4787 (KE, OS); 10 Jul 1986—OSU campus, banks of the Olentangy R., E. King 6; 21 Jul 1986—Highbanks Metro Park (Delaware Co.), shallow water, Watts 339 (OS, OWU); Summer 1988—OSU campus, along the Olentangy R., Cols., DeLong; Summer 1988—along Big Darby Creek between I-70 & Little Darby Creek, Galloway Quad., DeLong; 11 Aug 1989—just S of Fishinger Rd. bridge, along E bank of Scioto R., Trabue-Murphy Landing, Perry Twp., Lowden 4280; 23 Sep 1991—Scioto R., edges of gravel bars, just N of I-270, Hamilton Twp., SW Cols. Quad., McCormac 4340.

## PEDALIACEAE, Sesame Family

#### 1. PROBOSCIDEA Schmidel, Unicorn-plant

Coarse glandular-pubescent strong-scented herb; leaves opposite or upper alternate, long-petioled, cordate, entire or nearly so; flowers perfect, hypogynous, in terminal racemes; calyx 5-lobed, split to base on lower side; corolla 3-6 cm long, somewhat 2-lipped, 5-lobed; fertile stamens 4, on the corolla; carpels 2, united, style 1; ovary 1-loculed, placentae 2, parietal, winged; proboscislike style-base of fruit splitting into 2 horns.

# 1. \*†Proboscidea louisianica (Mill.) Thell.

Unicorn Plant, Proboscis-flower

Cultivated escape (native of SE U.S.)

Plants glandular-hairy; leaves simple, palmately nerved, shallowly lobed, subopposite; corolla white, tinged with pink, 5-lobed, zygomorphic; fruit firm, beaked.

REFERENCES: Riddell 1834:157 (Martynia proboscidea, naturalized); Sullivant 1840:37, 59 (Martynia proboscidea L., introduced a few years since, by Col. A. J. McDowell, into our gardens; from whence it has spread, and will doubtless soon be one of our naturalized plants; cultivated for its immature fruit, which is pickled and used as a condiment, much esteemed by many); Selby & Craig 1890:13 (Martynia proboscidea Gloxin); Cooperrider 1995:499 (illus. p. 498).

HERBARIUM RECORD: 15 Jul 1941-Cols., escaped from gardens, Gardiner.

# BIGNONIACEAE, Trumpet-creeper Family

Trees, shrubs, and vines; leaves opposite or whorled; flowers large, hypogynous, bisporangiate, clustered; calyx of united sepals; corolla showy, campanulate or funnelform, 5-lobed, sometimes 2-lipped; fertile stamens 4 or 2, on the corolla; 1-3 staminodes sometimes present; carpels 2, united; style 1, stigma 2-lobed; ovary 2-loculed; placentae central; fruit an elongate capsule; seeds flat, winged.

- a Leaves simple; trees. 1. CATALPA
- a' Leaves pinnately compound, leaflets 5 or more, toothed; vines. 2. CAMPSIS

#### 1. CATALPA Scop. Catalpa, Indian-bean

The Ohio State University Herbarium Columbus, Ohio

Trees; leaf-blades large, ovate, sometimes cordate at base, with prominent glands in axils of veins on lower side; flowers in terminal panicles; corolla white or yellow spotted with violet; anther-bearing stamens usually 2, vestiges 3; capsule slender, beanlike, 2-5 dm long.

a Corolla 5 cm wide or more, little spotted, lower lobe emarginate; wings of seed not narrowed at tip. 1. C. speciosa

a' Corolla 4 cm wide or less, much spotted, all lobes erose; wings of seed narrowed at tip; leaves illscented when bruised. 2. C. bignonioides

#### 1. \*Catalpa speciosa Warder

Northern Catalpa, Cigar-tree

Probably Cultivated (native to regions S of Ohio)

Similar to Catalpa bignonioides except leaves are long attenuate-acuminate at apex.

HERBARIUM RECORDS: Jul 1888—Cols., Craig; 25 Jun 1892—Cols., Bogue (BGSU); 6 Jun 1911—Westerville, Hanawalt; 14 Jun 1989—Lane Ave., 1 blk. W of Neil Ave. jct., Clinton Twp., Cols., Lowden 4169.

NOTE: Not mapped for Franklin Co. by Cooperrider 1995:497 (illus. p. 498).

### 2. \*Catalpa bignonioides Walter

Indian Bean, Southern Catalpa

Cultivated (native of SE U.S.)

Tree; leaves whorled or opposite, simple, long-petiolate; blades large ovate, short-acuminate at apex, undersurface pubescent; flowers in a large terminal panicle; corolla whitish with yellow stripes and purple-brown spots inside; capsules long, linear-cylindric.

REFERENCES: Craig 1890:94 (there was a small grove of these trees set out on the W side of the island near the river several years ago, which seem to be well established, 15 Jun 1887, 18 Jun 1888, 20 Jun 1889); Kellerman & Werner 1893:228 (planted); Cooperrider 1995:497 (illus. p. 498). HERBARIUM RECORD: Jun 1888—Cols., Craig.

## 2. CAMPSIS Lour. Trumpet-creeper

Climbing; with aerial rootlets; flowers with red-orange corollas 6-8 cm long, short-pediceled, in terminal clusters; corolla tube elongate, limb 5-lobed, slightly 2-lipped; fertile stamens 4; capsule 1 dm long or more.

## 1. Campsis radicans (L.) Seem.

Trumpet-vine, Trumpet-creeper, Trumpet Flower

Native (probably)

Plants woody, climbing, vines or trailing; leaves opposite, pinnately compound, leaflets 7-11, serrate; flowers bright orange-red; stamens 4, included; capsule shaped like a legume pod. Syn.: Bignonia radicans L., Tecoma radicans (L.) Juss

REFERENCES: Riddell 1834:157 (bottomland—dense and shady woods); Sullivant 1840:37; Selby & Craig 1890:13; Braun 1961:315 (illus. p. 314); Cooperrider 1995:495 (illus. p. 496).

HERBARIUM RECORDS: 29 Jun 1882—OSU campus, Cols., Devol; 27 Jun 1899—Groveport, Helfrich; 22 Oct 1903—Cols., J. H. Schaffner; 11 Jul 1982—Blendon Woods, fence in refuge, Owens; 19 Jun 1989—Antrim Park, E of Rt. 315, Sharon Twp., Lowden 4221.

## LENTIBULARIACEAE, Bladderwort Family

#### UTRICULARIA L. Bladderwort

Herbs, aquatic or of wet soil; stems floating or prostrate on soil in shallow water, or subterranean in wet soil; leaves alternate, dissected or simple, some or all usually bearing tiny bladders; flowers hypogynous, perfect, in racemes or solitary; calyx deeply 2-lipped; corolla yellow, 2-lipped, of 5 united petals, spurred at base, with prominent palate, upper lip entire or 2-lobed, lower lip entire or 3-lobed; stamens 2, on corolla tube; carpels 2, united; style short or none; stigma 2-lobed; ovary 1-loculed; placenta central, free.

- a Plants of wet soil; leaves simple, linear-filiform, on delicate underground stems; flowers few, on a scape, each with bract and 2 bractlets; capsule covered by calyx. 1. U. cornuta
- a' Plants aquatic; leaves dissected; bractlets absent.
  - b Lower lip of corolla about twice as long as upper; leaf-segments not much narrowed after each forking, ultimate ones flat. 2. U. intermedia
  - b' Lips of corolla about equal; leaf-segments narrower after each forking, ultimate ones terete and filiform.

