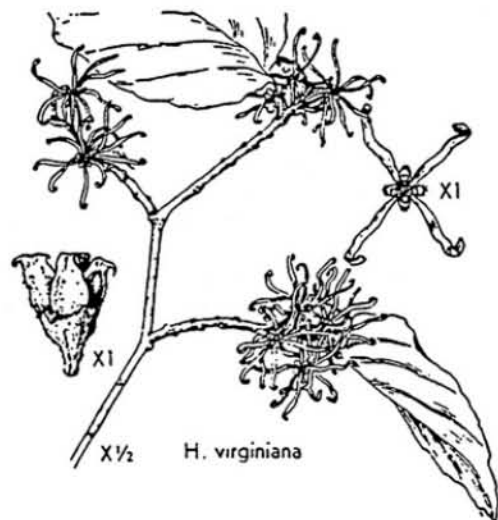
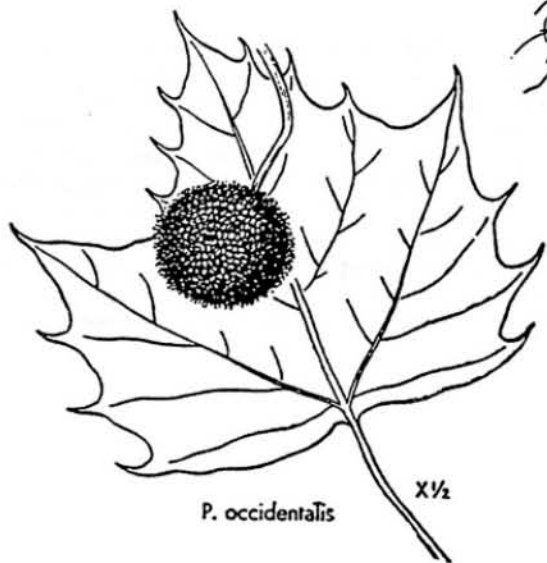
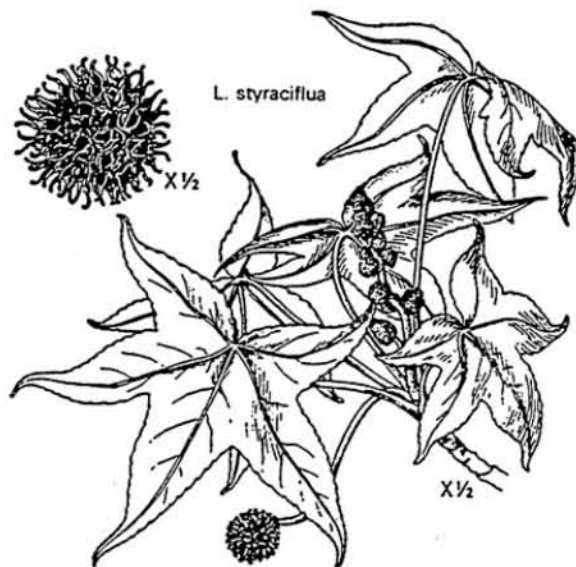
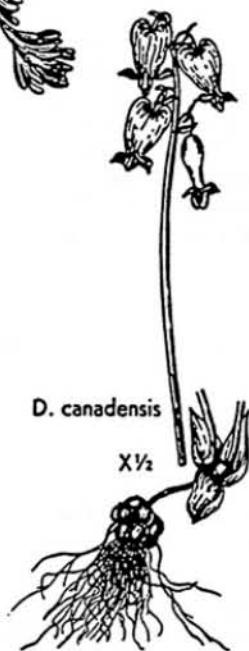
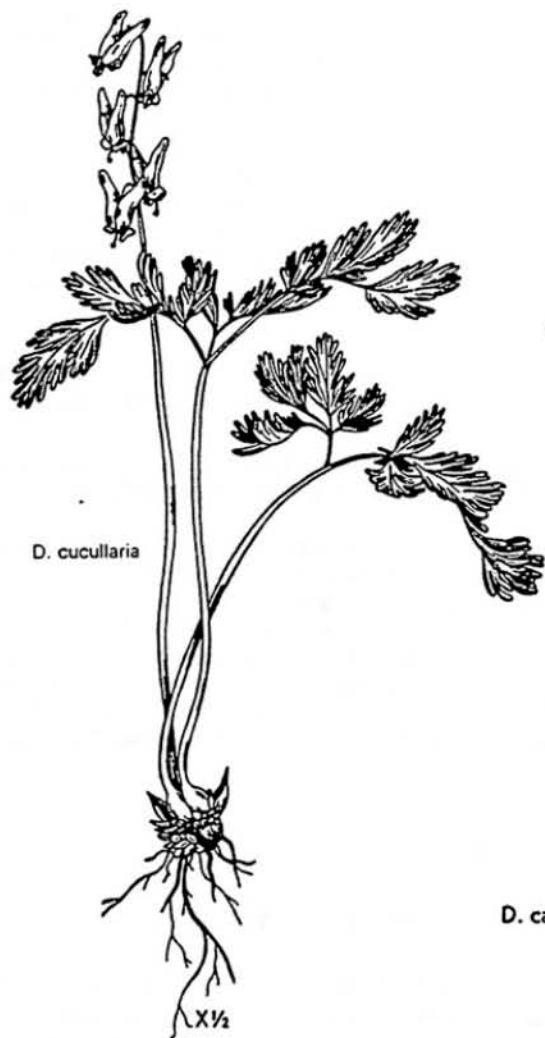


DICENTRA  
CORYDALIS  
FUMARIA  
PLATANUS  
LIQUIDAMBAR  
HAMAMELIS



Stem diffusely branched; leaves decompose; flowers zygomorphic; sepals somewhat toothed; petals pink- or red-purple with darker tips; fruit 1-seeded, globose, 2-3 mm wide, indehiscent.

1. *Fumaria officinalis* L.

Fumitory

Adventive (native of Europe)

Stems diffusely branched; leaves decompose; flowers zygomorphic; sepals 2, minute, somewhat toothed; petals pink or red-purple, darker at tips; fruit globose, 2-3 mm wide, 1-seeded.

HERBARIUM RECORD: 1837—Cols., *J. Paddock Collection*, I. G. Jones (ILL).

## PLATANACEAE, Plane-Tree Family

### 1. PLATANUS L. Plane Tree

Large trees with peeling bark; leaves alternate, simple, palmately veined and lobed; stipules foliaceous, encircling twig; flowers monosporangiate, the 2 kinds in separate spherical heads on same tree; staminate flower with small calyx, 3-7 stamens, and minute petals, filaments short or none, a fleshy cap at top of anthers; carpellate flower hypogynous, calyx small, petals present or absent, staminodes present, carpels several, separate; fruit an aggregate of achenes.

a Exposed inner bark white; fruiting heads usually solitary. 1. *P. occidentalis*

a' Exposed inner bark greenish or yellowish; fruiting heads 1-3 per peduncle; often planted. 2. *P. × hybrida*

1. *Platanus occidentalis* L.

Sycamore, Button-wood

Large tree, bark peeling, exposed inner bark white; fruiting heads usually solitary; fruit an aggregate of achenes. REFERENCES: Riddell 1834:119 (bottomland); Sullivant 1840:23; Craig 1890:101 (very common on the campus and along the river; some attain a large size, one being 130 feet high and 18 feet in circumference four feet above the ground); Selby & Craig 1890:15; Braun 1961:159 (illus. p. 160).

HERBARIUM RECORDS: 1897—OSU Campus, *Ruppersberg*; 11 May 1901—Marble Cliff, *Mead*; 10 Sep 1901—Cols., *Tyler & Jennings*; 4 Oct 1901—Cols., OSU Campus, *Hartford*; 11 Jun 1937—Hayden Falls, *J. H. Schaffner*; 3 Oct 1965—W bank Olentangy R., ½ mi. S of Henderson Rd. on Rt. 315, *Anderson* (KE); [ca. 1982]—Blendon Woods, common, *Owens*; 30 Aug 1982—Highbanks Metro Park (Franklin & Delaware Cos.), floodplain, *Brauning* 228; 6 May 1984—OSU Campus, *Kattler* 35; 16 Apr 1986—OSU, close to Biological Science Bldg., Cols., *Cooperband* 33; 21 Jul 1986—Highbanks Metro Parks (Franklin Co.), floodplain, *Kosko*; 14 Jun 1989—OSU Campus, behind B&Z bldg., 1735 Neil Ave., Cols., *Lowden* 4189.

2. *Platanus × hybrida* Brot.

London Planetree

Cultivated along streets; planted on the OSU Campus (Trees OSU)

Exposed inner bark greenish or yellowish, fruiting heads 1-3 per peduncle, and the leaves often more truncate or broadly cuneate at the base. Syn.: *P. × acerifolia* (a fertile putative hybrid of *P. occidentalis* and the Old World *P. orientalis* L.)

HERBARIUM RECORDS: 24 Apr 1986—OSU Campus, Millikin Rd., E of Larkins Hall, Cols., *Hollander* 016; 29 Apr 1988—OSU campus, W of B&Z Bldg., N of greenhouse, *M. Hoffman* 37.

NOTE: See Braun 1961:159.

## HAMAMELIDACEAE, Witch Hazel Family

Trees and shrubs with alternate simple leaves; flowers monosporangiate or bisporangiate; perianth regular, of 4 sepals and 4 petals, or none; stamens 4-many; carpels 2, united, styles 2, ovary 2-loculed, partly inferior.

a Leaves palmately veined, palmately lobed; petals none; flowers in dense globular clusters. 1. LIQUIDAMBAR

a' Leaves pinnately veined, margins repand; petals 4, yellow, linear; flowers in small axillary clusters.

### 2. HAMAMELIS

#### 1. LIQUIDAMBAR L. Sweet or Red Gum

Tree; leaves palmately veined, lobes 5, serrate, narrowly triangular; pith 5-angled; monoecious; flowers monosporangiate, without perianth, but with minute scales, the staminate of many stamens, in heads, the heads in racemes; carpellate flowers cohering in axillary peduncled spherical heads, consisting of 2 styles and ovary; ovules many in each locule, 1 or 2 maturing; fruit multiple.

1. *\*Liquidambar styraciflua* L.

Sweetgum, Red Gum

Native but cultivated

Tree, pith 5-angled; leaves palmately veined, lobes 3 or 5, serrate, narrowly triangular; flowers monosporangiate, without perianth; carpellate flowers in axillary peduncled spherical heads; fruit multiple.

REFERENCES: Craig 1890:79 (only a few specimens on the farm; one is W of the college bldg., the others are on the river bank E of the island); Kellerman & Werner 1893:227-228.

HERBARIUM RECORDS: 1897—OSU Campus, *Ruppersberg* 68; 7 Oct 1901—Cols., City Park, *Hartford*; 26 Oct 1901—Cols., *J. H. Schaffner*; 19 May 1969—OSU, Cols., *Wiley* 22; [ca. 1982]—Blendon Woods, *Owens*; 20 Apr 1988—OSU campus, just N of Women's Fieldhouse, SW of Cunz Hall, *Gerberick* 11; 26 Apr 1988—OSU, N of NE corner of Women's Fieldhouse, *Chinery* 19; 14 Jun 1989—OSU Campus, behind Campbell Hall, Cols., *Lowden* 4155.

NOTE: See Braun 1961:158 (illus. p. 157).

2. **HAMAMELIS** L. Witch Hazel

Shrub; leaves 2-ranked, short-petioled, blades oblique and rounded or cordate at base; buds stalked; flowers bisporangiate or some of them monosporangiate, in axillary clusters, appearing in autumn; sepals, petals, stamens, and staminodes 4; petals yellow, 1.5-2 cm long, ribbonlike; hypanthium adnate to base of carpels; fruit a 2-seeded capsule.

1. *Hamamelis virginiana* L.

Witch Hazel

Shrub-like or tree-like, buds stalked; leaves 2-ranked, pinnately veined, short-petioled; blades oblique, margins wavy; flowers in axillary clusters; sepals, petals, stamens and staminodes 4; petals yellow, ribbonlike.

REFERENCES: Riddell 1834:117; Sullivant 1840:10; Selby & Craig 1890:10; Braun 1961:158 (illus. p. 157).

HERBARIUM RECORDS: Nov 1888—Neils Run, Cols., *Craig*; 1890—Neil's Run, Cols., *Selby* (WOOS); 1897—Neal's [Neil's] Run, *Ruppersberg*; 12 Oct 1897—Cols., *Fullmer*; 4 Oct 1901—N Cols., *Eckman*; 16 Nov 1906—N Cols., *Spease*; 30 Oct 1982—Blendon Woods, near Duck Blind, *Owens*; 5 Apr 1986—Highbanks Metro Park (Delaware Co.), orchard bluffs, closed forest, *Wutsberger* 873 (OWU).

**ULMACEAE**, Elm Family

Trees and shrubs; leaves alternate, 2-ranked, simple, petioled, stipules early deciduous; flowers hypogynous or perigynous, bisporangiate or monosporangiate; petals none; stamens usually the same number as sepals and opposite them; carpels 2, united; styles short or absent; stigmas 2; ovary 1-loculed, with 1 ovule; fruit a samara or a drupe.

*Zelkova serrata* (Thunb.) Mak. is Asiatic in origin and locally planted as an ornamental tree on the OSU Campus (24 May 1967—OSU, parking lot behind Campbell Hall, Cols., *Cooke & Stuckey*; 22 Apr 1986—OSU Campus, W of Campbell Hall, Cols., *Di Sabato-Aust* 25; 14 Jun 1989—behind Campbell Hall, OSU Campus, Cols., *Lowden* 4152). This tree has a round-topped crown, leaves simple, 2-ranked, alternate, pinnately veined, flowers short-pedicled.

a Flowers in fascicles or racemes, appearing in spring before the leaves or in autumn; sepals united; leaves pinnately veined; fruit a samara. 1. **ULMUS**

a' Flowers solitary or in clusters of a few in axils of leaves of the season; sepals separate; leaves with 3 main veins from top of petiole; fruit a drupe. 2. **CELTIS**

1. **ULMUS** L. Elm

Trees; leaves serrate or doubly serrate, often oblique at base; flowers bisporangiate, small, red-purple, yellow, or green, in fascicles or racemes, in most species appearing before the leaves; calyx 4- to 9-lobed; fruit a 1-seeded samara.

Several cultivated species of *Ulmus* are included in the key below.