

DIVISION MAGNOLIOPHYTA, FLOWERING PLANTS

CLASS MAGNOLIOPSIDA, DICOTYLEDONS

MAGNOLIACEAE, Magnolia Family

Deciduous or evergreen trees and shrubs; leaves alternate, simple, stipules covering vegetative buds and leaving complete rings as scars; flowers large, hypogynous, bisporangiate, solitary; perianth parts similar, separate, in circles of 3, each circle regular; stamens many, spirally arranged; carpels many, on an elongate receptacle, separate or somewhat united; fruit a conelike aggregate.

- a Leaf-blades rounded to acute at apex, not truncate or emarginate, entire. **1. MAGNOLIA**
- a' Leaf-blades broadly emarginate or truncate at apex, usually shallowly lobed. **2. LIRIODENDRON**

1. MAGNOLIA L. Magnolia

Deciduous or evergreen trees and shrubs; leaf-blades entire; perianth of 9-18 similar segments; fruit an aggregate of follicles, each with 1 or 2 red berrylike seeds which remain on the threadlike attachments for some time after dehiscence of follicles.

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

- a Flowers appearing after or with the leaves.
 - b Leaves evergreen, coriaceous; flowers white, to 2 dm wide; trees. *M. grandiflora* L., Bull Bay
 - b' Leaves deciduous.
 - c Shrub or small tree; blades glaucous beneath, elliptic to oblong, to about 1 dm long; buds slender, pointed; flowers white, to 7 cm wide. *M. virginiana* L., Sweet Bay
 - c' Trees, native; leaves larger.
 - d Blades 3-6 dm long; buds and twigs glabrous; flowers white, to 2.5 dm wide, with unpleasant odor. †*M. tripetala* L., Umbrella M.
 - d' Blades usually less than 2.5 dm long; twigs glabrous or nearly so; buds silky-pubescent; flowers greenish-yellow, less than 10 cm wide. **1. *M. acuminata***
- a' Flowers appearing before the leaves; buds densely pubescent; blades obovate.
 - e Sepals and petals alike, 12-18, white. *M. stellata* (Siebold & Zucc.) Maxim.
 - e' Sepals 3, smaller than the petals; petals purplish, rarely white. *M. soulangeana* Soul.-Bod., Saucer Magnolia

1. *Magnolia acuminata* (L.) L.

Cucumber-tree, Cucumber Magnolia

Native but cultivated

Tree, buds silky pubescent; leaves large, broadest near or below the middle; petals 5-8 cm, greenish-yellow.

REFERENCES: Riddell 1834:117; Braun 1961:145 (illus. p. 140).

HERBARIUM RECORDS: Aug 1890—Central College, Cols., Selby; 1891—Central College, Selby (WOOS); 14 Oct 1902—Cols., Sanders; 19 Sep 1934—near Westerville, large tree in forest, Camp; 24 May 1967—OSU SE corner of Main Library, cult., Cols., Cooke & Stuckey; 16 May 1982—Park of Roses, N. High St., cult., Cols., T. Lammers.

NOTE: Sullivant 1840:7 and Selby & Craig 1890:7 reported on plants collected in adjacent counties.

2. LIRIODENDRON L. Tuliptree, Tulip-poplar

Tree; sepals 3; petals 6, greenish-yellow with orange blotch, upright, 4-5 cm long; mature carpels samaralike, 1-2-seeded.

1. *Liriodendron tulipifera* L.

Tuliptree, Tulip-poplar, Yellow-poplar

Native but cultivated

Tree; leaves 4-lobed; flowers large; sepals 3; petals 6, greenish-yellow with orange blotch; receptacle ripening into a cone of dry samara-like fruits.

REFERENCES: Riddell 1834:117; Braun 1961:145 (illus. p. 146).

HERBARIUM RECORDS: Spring 1889—Cols., *Craig*; Jun 1891—Hommon's Corners, Cols., *Selby*; 1897—OSU Campus, *Ruppersberg 24*; 14 Jun 1898—Cols., *J. H. Schaffner*; 3 Jun 1901—OSU campus, cult., *Mead*; 7 Oct 1901—City Park, planted, Cols., *Hartford*; 1912—OSU campus, cult., Cols., *J. H. Schaffner*; 18 Jun 1928—Westerville, open woods, common, *Hicks*; 15 Jun 1935—Minerva Park, Cols., *Blaydes*; [ca. 1982]—Blendon Woods, not common, tree near Blind may have been planted, *Owens*; 10 Jun 1983—OSU campus, cult. on Oval, Cols., *T. Lammers 5106* (BHO, OS); 19 May 1986—OSU campus, Oval, Cols., *Blanco*; 28 May 1986—OSU campus, Oval near Bricker Hall, *Yang 207*; 31 May 1986—Worthington, corner of Larrimer & Hayhurst, *Benkowski 37*; 26 May 1988—OSU campus, N Oval, S of Bricker Hall, *Gerberick 49*; 14 Jun 1989—OSU campus, E side of Biological Sciences Bldg., Cols., Clinton Twp., *Lowden 4158*; 18 May 1991—OSU, N side of Oval, Cols., *Gara 58*.

NOTE: Sullivant 1840:7 and Selby & Craig 1890:7 reported on plants collected in adjacent counties.

ANNONACEAE, Custard-apple Family

1. ASIMINA Adans. Pawpaw

Small tree with alternate 2-ranked simple leaves; blades entire, obovate to oblanceolate; flowers hypogynous, bisporangiate, short-peduncled, 3-4 cm wide, from buds in axils of last year's leaves, appearing before or with young leaves of the season; perianth regular; sepals 3; petals 6, in 2 whorls, separate, maroon; stamens many spirally arranged, filaments short, anthers 4-loculed; carpels few to several, separate, each of the 1-few that mature becoming a fleshy several-seeded berry 5-12 cm long.

1. *Asimina triloba* (L.) Dunal

Pawpaw

Small shrub or tree; leaves alternate, 2 ranked, simple; blades entire, obovate to oblanceolate; flowers appear before or with young leaves of the season; perianth regular; sepals 3; petals 6, in 2 whorls, separate, maroon; stamens many; fruit a fleshy several-seeded berry.

REFERENCES: Riddell 1834:117 (bottomland); Sullivant 1840:7 (*Uvaria triloba* Torr. & A.Gray); Craig 1890:64 (this tree is well distributed, preferring a deep rich soil, common along the river, in the woods, and on the island where it was formerly very abundant, but nearly all the trees were cut down when the island was cleared off, and the few specimens that remain are small shrubs that bear but little fruit, 23 May 1882, 5 May 1883, 28 May 1884, 23 May 1885, 7 May 1887, 10 May 1888, 24 Apr 1889); Selby & Craig 1890:7; Braun 1961:149 (illus. p. 148).

HERBARIUM RECORDS: 1833—Worthington, *J. Paddock Collection* (ILL); 1840—Cols., *Sullivant*; Apr 1890—Wyandotte Grove, Cols., *Selby*; 27 Apr 1892—near Cols., *E. M. Wilcox*; 1897—OSU Farm, Cols., *Ruppersberg 46*; 10 Sep 1901—Cols., *Tyler & Jennings*; 6 Oct 1902—Cols., *Sanders*; May 1911—NE of Westerville, *Hanawalt*; 21 May 1971—just N of Hudson St. on N Olentangy River Rd., *Wagner & D. Keil et al. 7247*; [ca. 1982]—Blendon Woods, fairly common, *Owens*; 25 Apr 1985—Scioto R., Rt. 33 ½ mi. S of Rt. 161, quarry allotment, *Rutter*; 17 Jun 1986—Highbanks Metro Park (Delaware Co.), floodplain along Olentangy R., *Kosko*; 28 Apr 1987—W bank of Olentangy R., N of Dodridge St. bridge & E of Union Cemetery (S unit), mesic forest on floodplain, Cols., *T. Lammers 6085*; 9 May 1988—½ mi. N of Henderson Rd., bike path W of Olentangy R., *Chinery 28*; 6 Jul 1991—OSU University Woods, W of Kenny Rd., & N of Lane Ave., back of Agronomy Turfgrass Research Center, Cols., Clinton Twp., *Lowden 4774*.

CALYCANTHACEAE, Strawberry-shrub Family

1. CALYCANTHUS L. Sweet Shrub, Carolina Allspice

Shrubs; leaves opposite, simple; blades ovate, entire; flowers perigynous, bisporangiate, regular, solitary; perianth parts many, separate, similar, lanceolate, maroon, attached at or below rim of the concave hypanthium (receptacle); stamens several to many; carpels several to many, separate, within the concavity; fruit an aggregate of achenes enclosed by the hypanthium.

1. **Calycanthus floridus* L.

Cultivated

Shrub; leaves opposite, simple, ovate to elliptic, soft pubescent beneath; flowers strawberry-fragrant; tepals maroon-red, attached at or below rim of hypanthium; carpels separate within hypanthium cup; stamens many.

HERBARIUM RECORDS: 9 Jun 1921—Westerville, cult., *Hite*; 16 May 1982—444 E. Acton Rd., ½ mi. E of High St., backyard, cult. shrub 12 feet, Cols., *Paulsen 54*; 15 May 1988—OSU, NW corner of Mirror Lake, cult., 15-20 shrubs, *Chinery 29*.

NOTE: See Braun 1961:147.

MAGNOLIA
ASIMINA
LIRIODENDRON

