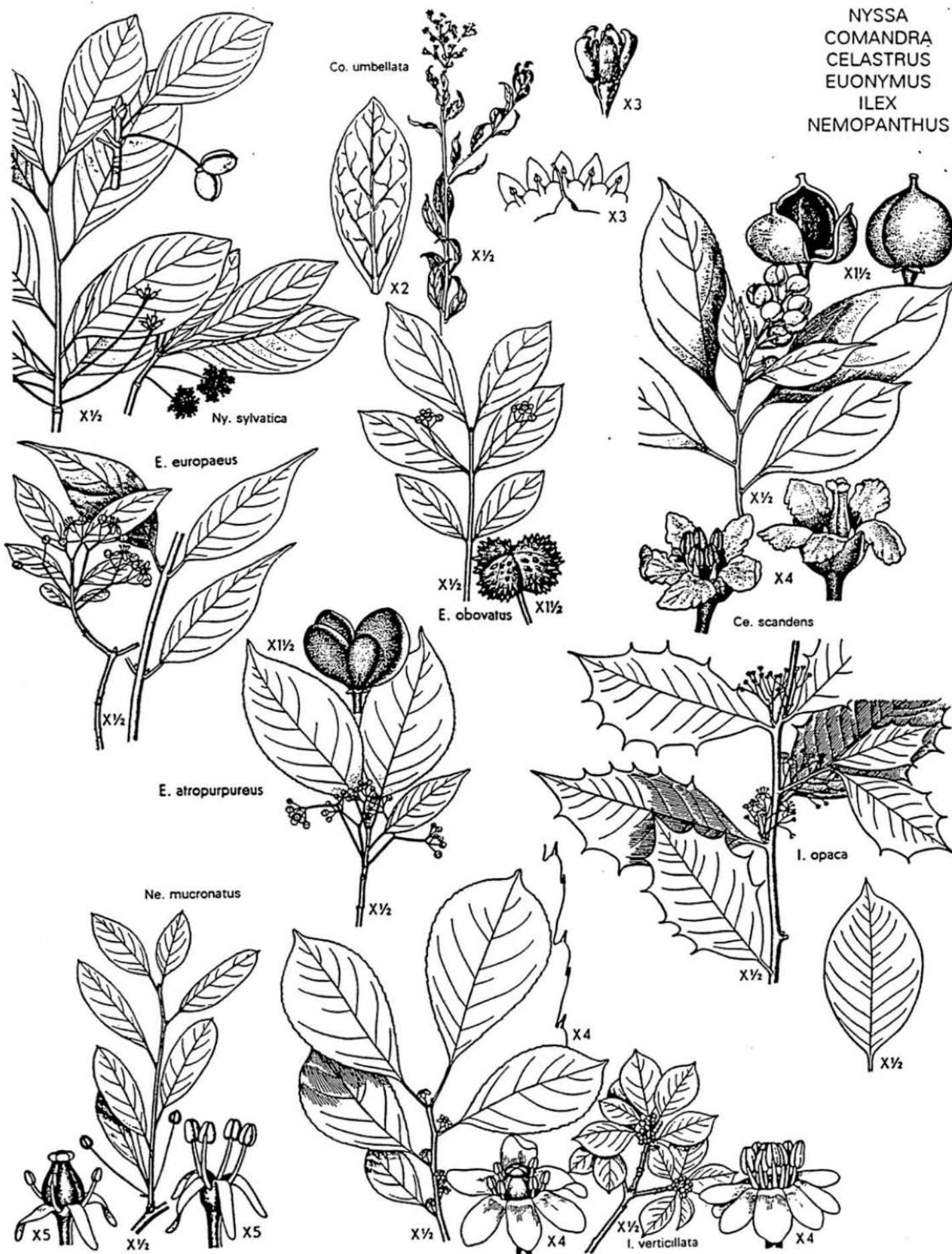


NYSSA
COMANDRA
CELASTRUS
EUONYMUS
ILEX
NEMOPANTHUS



Trees; leaves alternate, simple, blades obovate, entire or with a few large teeth; mostly dioecious, but some perfect flowers may be present; flowers small, greenish, the staminate in peduncled umbel-like clusters, the carpellate epigynous, in few-flowered peduncled heads; sepals 5, minute; petals 5, small or none; stamens 5 or more, at edge of disk; ovary 1-loculed; ovule 1; fruit a drupe.

1. *Nyssa sylvatica* Marshall

Sour-gum, Black-gum, Black Tupelo

Tree; leaves alternate, simple, mostly entire, blades obovate; fruit a dark blue drupe. Dry or moist woodlands.

REFERENCES: Riddell 1834:118 (*Nyssa multiflora*); Sullivant 1840:23 (*Nyssa multiflora* Walter); Selby & Craig 1890:10; Braun 1961:275 (illus. p. 278); Cooperrider 1995:173 (illus. p. 172).

HERBARIUM RECORDS: Aug 1890—Headley's woods, Selby; 1897—Neil's Run, Cols., Ruppertsberg 92; 15 Oct 1902—Neil's Run, Cols., Sanders; 1 & 9 Oct 1903—Cols., J. H. Schaffner, [ca. 1982]—Blendon Woods, fairly common, front of nature center, Owens; 10 Jul 1982—OSU campus, cult. between Main Library & University Hall, T. Lammers 4745; 5 Oct 1982—Scenic Nature Preserve, Highbanks Metro Park (Franklin & Delaware Cos.), blufftop, G. Moore 201.

SANTALACEAE, Sandalwood Family

Perennial herbs; usually partially parasitic on underground parts of other plants; leaves alternate, blades entire; flowers small, white, epigynous with epigynous hypanthium, in small clusters; sepals 5; petals none; stamens 5, at edge of disk; carpels 3-5, united; locule 1; fruit a drupe, 1-seeded, 4-10 mm wide.

1. *COMANDRA* Nutt.

Flower-cluster terminal, corymbiform; flowers all bisporangiate; fruit dry.

1. *Comandra umbellata* (L.) Nutt.

Bastard Toad-flax

Herb; leaves alternate, blades entire; flowers small, epigynous with an epigynous hypanthium; inflorescence terminal, corymbiform; tepals 5, whitish; stamens 5.

REFERENCES: Riddell 1834:118 (*Thesium umbellatum*; rocky situations); Sullivant 1840:23; Selby & Craig 1890:15.

HERBARIUM RECORDS: 1840—Cols., Sullivant; May 1891—Big Darby Creek, Cols., Selby; 9 May 1891—near Big Darby Creek, Cols., Selby (WOOS); 4 May 1895—Georgesville, Osburn; 1925—Westerville, Big Walnut Creek, dry shale banks, Camp; 2 Jul 1932—Red Hills, Hicks; 11 May 1970—Camp Johnson, 8 mi. N of OSU on N. High, frequent in patches on dry sunny hillsides, Boone 138; 25 May 1982—Highbanks Metro Park (Franklin & Delaware Cos.), blufftop, G. Moore; 24 Jun 1982—Highbanks Metro Park (Franklin & Delaware Cos.), blufftop, G. Moore 297; 17 May 1983—Battelle-Darby, Owens; 10 May 1987—Highbanks Metro Park (Delaware Co.), bluffs, Higgins 15 (OS, OWU); 7 May 1992—Cedar Bluff Overlook, Battelle Darby Creek, Metro Park, Pleasant Twp., Lowden 4931; 14 May 1992—Graessle Rd. Bluff Area, Battelle Darby Creek Metro Park, Pleasant Twp., Lowden 4946; 30 May 1993—Hoover Dam Park, W of Cubbage Rd. & S of Walnut St., Blendon Twp., Lowden 5053.

CELASTRACEAE, Staff-tree Family

Small trees, shrubs, and woody vines; leaves simple; flowers hypogynous, bisporangiate or monosporangiate; hypogynous disc present; perianth regular; sepals, petals, and stamens 4-5; carpels 2-5, united, locules of ovary and lobes of stigma as many; style short or none; fruit a capsule; seeds with arils.

a Leaves alternate; vines. 1. *CELASTRUS*

a' Leaves opposite; small trees or erect or prostrate shrubs. 2. *EUONYMUS*

1. *CELASTRUS* L. Bittersweet

Woody vine; leaves alternate, pinnately veined, serrate; dioecious, each kind of flower with rudiments of the other sporophylls, or some bisporangiate flowers on the same plant as the monosporangiate ones; panicles terminal; petals greenish-white, small; sepals, petals, and stamens 5; carpels 3; fruit orange; seeds 1 or 2 in each locule, arils scarlet.

1. *Celastrus scandens* L.

American Bittersweet, Waxwork, Climbing Staff Tree

Twining woody vine; leaves alternate, oblong-elliptic to ovate; flowers and fruits more than 6 in terminal panicles; capsules dull-orange, arils scarlet.