

The Ohio State University Herbarium Columbus, Ohio

Flowers bisporangiate or some of them monosporangiate, on twigs of current season; hypanthium tubular, constricted above ovary; leaves alternate; stamens 4.

- a Leaves lanceolate, silvery scales on both sides; calyx tube slightly longer than lobes; fruit yellow, stalks 2-4 mm long. 1. E. angustifolia
- a' Leaves elliptic to ovate or lanceolate, green and somewhat glabrescent above, silvery scales beneath; calyx tube at least 2 times as long as lobes; fruit red, stalks 3-5 mm long. 2. E. umbellata

## 1. \*Elaeagnus angustifolia L.

Russian-olive, Oleaster

Planted Ornamental (native of Eurasia)

Shrub or small tree; leaves alternate, lanceolate or narrowly lanceolate; leaves and young branches covered with silvery scales only; fruit yellow with silvery scales.

HERBARIUM RECORDS: 7 Jun 1967—OSU campus, cult., Cols., Cooke & Stuckey; 12 May 1986—OSU, W Campus, Cols., Blanco; 18 May 1988—OSU, between Campus Loop Rd. & Howlett Hall parking lot, Chinery 49; 22 May 1988—W. Thurber Dr., Cols., Kelly 27; 3 Jun 1993—jct. of Bethel Rd. & Olentangy River Rd., Cols., Sharon Twp., Lowden 5071; 3 Jun 1993—S on Rt. 315, Lane Ave. exit, Clinton Twp., Lowden 5072. NOTE: Not mapped for Franklin Co. by Cooperrider 1995:166.

## 2. \*Elaeagnus umbellata Thunb.

Autumn-olive

Planted Ornamental (native of E Asia)

Shrub or small tree; leaves alternate, elliptic to ovate-oblong; leaves and young branches with silvery and brown scales; fruit red.

HERBARIUM RECORDS: 24 Jul 1986—Highbanks Metro Park, scattered, Kosko; 25 May 1994—main entrance to Darby Creek Metro Park, 1665 Darby Creek Dr., Stahl.

NOTE: Planted in every Metro Park (pers. comm., Jim Stahl). Not mapped for Franklin Co. by Cooperrider 1995:166 (illus. p. 164).

## HALORAGACEAE, Water-milfoil Family

Aquatic or marsh herbs; emersed leaves entire, toothed, or pinnatifid, submersed ones pinnatifid with linear or filiform segments; monoecious; flowers epigynous, bisporangiate or monosporangiate, sessile, axillary, solitary or few together; perianth regular; carpels 3-4, united, locules and ovules as many.

## 1. MYRIOPHYLLUM L. Water-milfoil

Submersed; leaves opposite or whorled; flowers small, 2-bracted, in axils of emersed leaves or bracts, the whole forming spikes, usually the carpellate below, the staminate above, and the bisporangiate in the transition zone; calyx of 4 sepals deeply parted in the staminate, toothed in the carpellate; petals 4 or none; stamens 4 or 8; carpels 4, separating at maturity, each 1-seeded, indehiscent; styles and stigmas separate.

- a Bracts, at least the lower, longer than flowers and fruits.
  - b Carpels in fruits smooth; stamens 8; bracts pinnatifid. 1. M. verticillatum var. pectinatum
  - b' Carpels in fruit rounded or keeled, beaked; stamens 4; bracts serrate to entire; stem stout. 3. M. heterophyllum
- a' Bracts shorter than flowers and fruits; stamens 8; stems white in drying; carpels in fruit smooth or finely tubercled.

2. M. sibiricum

# 1. †Myriophyllum verticillatum L. var. pectinatum Wallr.

Whorled Water-milfoil

Aquatic herb; flower on emersed stems; bracts of inflorescence deeply pinnatifid.

HERBARIUM RECORD: 1840-Cols., Sullivant.

NOTE: Sullivant 1840:10 (Myriophyllum species?, sine fl. & fr.). Not mapped for Franklin Co. by Cooperrider 1995:197 (illus. p. 196).

### 2. †Myriophyllum sibiricum Kom.

Common Water-milfoil

Native to Naturalized (European)

Syn.: M. exalbescens Fernald, M. spicatum

REFERENCE: Craig 1890:79 (common in ponds around the island and in the lake).

NOTE: No specimens seen from Franklin Co. Not mapped for Franklin Co. by Cooperrider 1995:195 (illus. p. 196). Kellerman & Werner 1893:226-227 referred to #143 Myriophyllum spicatum on Craig's list as a doubtful identification and indicated "a thorough but unsuccessful search was made ... in the localities named, the same season that the list was published."

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3. †Myriophyllum heterophyllum Michx.

REFERENCE: Craig 1890:79 (abundant in the lake).

Broad-leaved Water-milfoil

NOTE: No specimens seen from Franklin Co. Not mapped for Franklin Co. by Cooperrider 1995:197 (illus. p. 196). Kellerman & Werner 1893:226-227 referred to #144 Myriophyllum heterophyllum on Craig's list as a doubtful identification and indicated "a thorough but unsuccessful search was made ... in the localities named, the same season that the list was published."

# LYTHRACEAE, Loosestrife Family

Herbs; leaves opposite, whorled, or alternate, simple, entire; flowers perfect, perigynous, often dimorphic or trimorphic in length of filaments and of style; petals rarely none or sepals and petals 4-7, stamens as many or twice as many; carpels 2-6, united, ovary completely or incompletely 2-6-loculed; placentation axile; style 1; fruit a capsule.

- a Corolla not regular; hypanthium spurred or saccate on one side; sepals and petals 6. 5. CUPHEA
- a' Corolla regular or absent; hypanthium regular.
  - b Hypanthium cylindric, longer than wide; sepals and petals 5-7, stamens as many or twice as many.
    4. LYTHRUM
  - b' Hypanthium as wide as long, globose in fruit; petals 5, 4, or none.
    - c Tall plants with alternate, whorled, or opposite leaves; petals usually 5, stamens 10, of 2 lengths; flowers trimorphic. 1. DECODON
    - c' Low plants with opposite leaves; petals 4 or none; stamens equal; flowers of one form.
      - d Flowers usually solitary in axils; bases of leaves tapering. 2. ROTALA
      - d' Flowers usually clustered in axils; bases of at least upper leaves auricled. 3. AMMANNIA

### 1. DECODON J.F.Gmel. Swamp Loosestrife

Herbaceous to slightly shrubby; growing in swamps; stem angled, elongate, usually arching and rooting at nodes; leaves opposite, whorled, or alternate, lanceolate, short-petioled; flowers showy, trimorphic, in nearly sessile clusters in axils of upper leaves; sepals 4-8, alternating with linear appendages; petals 5, purple-pink, 10-15 mm long; stamens 10; capsule 3-5-loculed, dehiscent.

## 1. Decodon verticillatus (L.) Elliott

Swamp Loosestrife

Shrub-like, branches arched; leaves usually opposite or in whorls; blades lanceolate; flowers clustered in axils of upper leaves; petals purple-pink; hypanthium subglobose.

REFERENCES: Sullivant 1840:14; Selby & Craig 1890:10; Cooperrider 1995:170 (illus. p. 169).

HERBARIUM RECORDS: 1840-Cols., Sullivant; 4 Jun 1931-Westerville, Hicks.

### 2. ROTALA L. Tooth-cup

Low herbs of wet soil; stems erect or prostrate; blades opposite, short-petioled, linear-spatulate, 1-3 cm long; bases of leaves tapering; flowers small, solitary and sessile in axils; sepals 4, about as long as alternating appendages; petals 4, minute, white or pink, early deciduous; stamens 4; capsule 4-loculed, dehiscent; hypanthium equaling capsule.

### 1. Rotala ramosior (L.) Koehne

1 ootn-cup

Herbs; leaves opposite, linear-spatulate, narrowed at base to short petiole; flowers and fruits solitary and sessile in leaf axils; hypanthium globose to subglobose; petals white or pink, falling early. Wet places, mudflats. REFERENCES: Sullivant 1840:13 (Ammannia humilis Michx.); Selby & Craig 1890:10; Kellerman & Werner 1893:228 (fields back of North

Dormitory, 5 Aug 1890); Cooperrider 1995:168 (illus. p. 169).

HERBARIUM RECORDS: 5 Aug 1890—Cols., Werner (CLM, OS); 29 Aug 1933—Baumgardner's Pond, Chapman; 2 Oct 1987—W bank of the Olentangy R., just N of Lane Ave. bridge and S. of Fawcett Center for Tomorrow, wet open mudflat, T. Lammers & Stuckey 6191; Summer 1988—along the Olentangy R., OSU campus, mudflat near Fawcett Center, DeLong; 13 Oct 1991—Olentangy R., mudflat N of Lane Ave. bridge, S of Fawcett Center, Clinton Twp., Lowden 4879.

### 3. AMMANNIA L.