

Submersed aquatics; monoecious or dioecious; stems slender, branching; leaves linear, base wider and sheathing; flowers monosporangiate, minute, axillary; staminate flower a single stamen; carpellate flower 1 carpel with 1 style, 2-4 stigmas, and 1 ovule; markings on fruit visible through thin involucre. Many features used in key are visible only vhen magnified.

- a Sheath subtruncate at summit, with short teeth; leaves often recurved, margins finely toothed; areoles of fruit wider than long. 1. N. minor
- a' Sheath tapering at summit, longest at junction with linear portion of leaf; margins of leaf and sheath spinulose; areoles of fruit square or hexagonal.
 - b Fruit dull, with 20 or fewer rows of square areoles; style and stigmas ½ mm long or less; leaf-tips acute or obtuse. 2. N. guadalupensis
 - b' Fruit shining, with 30-40 rows of minute hexagonal areoles; style and stigmas 1-2.5 mm long; leaf-tips slender-pointed. 3. N. flexilis

1. *Najas minor All.

Naiad, Eutrophic Water-nymph

Naturalized (native of the Old World)

Leaves less than 2 mm wide incl. teeth; sheath subtruncate, with short teeth; areoles of fruit wider than long. REFERENCE: Wentz & Stuckey 1971:298.

HERBARIUM RECORDS: 27 Sep 1970—OSU Conservation Pond near Don Scott Field, Perry Twp., Cols., Storck; 3 Oct 1971—Scioto R., at the confluence with the Olentangy R., Cols., Roberts & Phillips 2239; 6 Aug 1977—Pickerington Marsh, intersection of Wright Rd. & Bowen Rd., 3 mi. W of Pickerington & 3 mi. N of Canal Winchester, Sect. 18, Madison Twp., Sect. 17, Violet Twp., Franklin/Fairfield Co. line, Eu. Wright; 6, 12 & 24 Jun 1991—Antrim Park, all along the W edge of the lake, Sharon Twp. Lowden 4652, 4685 & 4740; 7 Sep 1991—Antrim Park, drainage ditch at entrance & border of lake, E of Rt. 315 & N of Bethel Rd., Sharon Twp., Lowden 4792-4794; 6 Jul, 10 Aug & 30 Aug 1992—Pickerington Ponds, wetland wildlife area, just S of Wright Rd. & E of Bowen Rd., Madison Twp., Lowden 4985, 5031 & 5040.

NOTE: Not mapped for Franklin Co. by Braun 1967:43 (illus. p. 44).

2. †Najas guadalupensis (Spreng.) Magnus

Naiad, Southern Water-nymph

Leaves acute to obtuse, finely toothed; sheath at leaf-base rounded; areolae squarish. HERBARIUM RECORD: 24 Jun 1991—Antrim Park, SW edge of lake, Sharon Twp., Lowden 4739. NOTE: Not mapped for Franklin Co. by Braun 1967:45 (illus. p. 44).

3. †Najas flexilis (Willd.) Rostk. & Schmidt

Slender Najas, Northern Water-nymph

Leaves less than 2 mm wide incl. teeth; sheath tapering at summit, longest at jct. with linear portion of leaf; margins of leaf and sheath spinulose; areoles of fruit square or hexagonal.

REFERENCE: Werner 1893:93 (cites "Cols., J. H. Lageman").

NOTE: No specimens seen from Franklin Co. Not mapped for Franklin Co. by Braun 1967:45 (illus. p. 44).

ZANNICHELLIACEAE, Horned Pondweed Family

Aquatic herbs, slender and widely branched; stems and leaves submersed; leaves opposite; flowers monosporangiate, sessile or nearly so, both kinds clustered in the same axil; perianth none; stamen 1; carpels 2-5, separate. (Zosteraceae, in part)

1. ZANNICHELLIA L. Horned Pondweed

Slender branching submersed herb; leaves linear; staminate flowers of 1 stamen; carpellate flower of 2-5 separate carpels subtended by a membranous sheath; fruit an aggregate of achenes with beaklike persistent styles.

1. Zannichellia palustris L.

Horned Pondweed

Submersed herb; leaves linear, all opposite; flowers and fruit clusters sessile in leaf-axils; achenes narrowly keeled, beaklike with a persistent short style.

REFERENCE: Braun 1967:42 (illus. p. 44).

HERBARIUM RECORDS: Sep 1896—Franklin Co., Tyler, 6 Jul 1992—Pickerington Ponds, wetland wildlife area, just S of Wright Rd. & E of Bowen Rd., Madison Twp., Lowden 4986.

ACORACEAE, Sweet Flag Family

Perennial herb; leaves linear; inflorescence a cylindric spadix, diverging from but not surrounded by the subtending linear leaflike spathe; flowers hypogynous, bisporangiate, tiny, numerous; style very short and broad; fruit indehiscent, hard and dry.

1. ACORUS L. Sweet Flag, Calamus

Of swamps, shallow water; rhizome aromatic; midvein of leaf usually at one side of center; flowers yellow, bisporangiate; perianth of 6 segments; stamens 6; ovary 2-3-loculed; fruit 1- to few-seeded.

1. Acorus calamus L.

Sweet Flag

Leaves linear; spadix cylindric, diverging from and not surrounded by the linear leaflike spathe; midvein of leaf usually at one side of center. Shallow water, swampy areas. Syn.: A. americanus Raf.

REFERENCES: Riddell 1834:158; Sullivant 1840:45; Craig 1890:106 (a few specimens growing near the iron spring, but nowhere else; a rare plant in the vicinity of Cols.); Selby & Craig 1890:16; Braun 1967:302 (illus. p. 299).

HERBARIUM RECORDS: Jul 1888—OSU, Cols., Craig; 1890—Franklin Co., Craig; 22 May 1901—Cols., Mead; 6 Jun 1989—Turkey Run, between Olentangy River Rd. & Pegg Ave. just S of Highland Dr., Clinton Twp., Lowden 4109.

ARACEAE, Arum Family

Perennial herbs; leaves broad, cauline and alternate or all basal; inflorescence a spadix surrounded by a broad subtending spathe; flowers hypogynous, monosporangiate or bisporangiate; perianth of 4-6 segments sometimes present in bisporangiate flowers, absent in monosporangiate ones; stamens 2-8; ovary 1-many-loculed; style present or stigma sessile.

- Leaves simple; spadix covered by flowers except sometimes at very tip.
 - b Spathe ovoid, fleshy, mottled with purple, brown, yellow, or green; leaf-blades ovate-cordate, lateral veins anastomosing. 1. SYMPLOCARPUS
 - b' Spathe green with pale margin, covering the elongate slender spadix; leaf-blades sagittate. 2. PELTANDRA
- a' Leaves compound; flowers on only base of spadix. 3. ARISAEMA

SYMPLOCARPUS Salisb. Skunk-cabbage

Leaves large, ovate, cordate at base; spathe almost sessile fleshy, margins inrolled; spadix globose, covered with the bisporangiate flowers; perianth segments 4; stamens 4; ovary embedded in spadix, 1-loculed, 1-ovuled.

1. Symplocarpus foetidus (L.) Nutt.

Skunk-cabbage

Leaves simple, broad; spathe well developed, thick and fleshy, variously striped or mottled green and dark purple, bulging around subglobose spadix. Syn.: S. foetidus Nutt., S. foetidus Salisb.

REFERENCES: Riddell 1834:158; Sullivant 1840:45; Craig 1890:106 (five plants growing in a small bog back of the larger dormitory; it has not been found elsewhere, and does not seem to spread, 12 Mar 1882, 5 May 1883, 29 Apr 1885, 19 Apr 1886, 23 Apr 1887, 8 May 1888, 17 Mar 1889; it grows abundantly in a swamp SW of Sellsville); Selby & Craig 1890:16; Braun 1967:300 (illus. p. 301).

HERBARIUM RECORDS: 1889—Cols., Selby (OS, WOOS); Apr 1890—Sellsville, Selby; 17 Jan 1892—near Cols., E. M. Wilcox; 5 Mar 1892—Cols., Werner, 9 Apr 1901—woody damp places along Olentangy R., Cols., Mead; 27 Mar 1971—along Scioto R., near limestone quarries, Roberts & D. Keil K6942; 18 Apr 1980—wet backwater area along E bank of Rocky Fork Creek, 100 m S of Warner Rd., about 2 mi. W of New Albany, Plain Twp., W. Carr 2623; 18 Mar 1982—wet seepage area on the forested floodplain of Walnut Creek, intersection of Rt. 40 (Main St.) & Noe-Bixby Rd., Truro Twp., Cols., T. Lammers 4507 (KE, OS); 21 Mar 1992—Kiwanis Park, ¼ mi. S of Dublin bridge off Rt. 33, E bank of Scioto R., Perry Twp., Lowden 4891.

2. PELTANDRA Raf. Arrow Arum

Monoecious; of swamps and shallow water; leaves basal, long-petioled; flowers monosporangiate, covering spadix except sometimes at tip, staminate above; staminate flower a cluster of sessile anthers, carpellate a carpel surrounded by scalelike staminodes; fruit a 1-3-seeded brown berry.

1. Peltandra virginica (L.) Schott & Endl.

Arrow Arum