

4. *Potamogeton foliosus* Raf.

Leafy Pondweed

Blades 3-5 nerved; plants with submersed leaves only; leaves linear; stems terete; fruits obliquely suborbicular, 2-2.5 mm long; the short (3-10 mm) stout peduncles slightly thickened upward and subcapitate or thick-cylindric spikes are distinctive characters of the species. Syn.: *P. pauciflorus* Pursh

REFERENCES: Sullivant 1840:46; Selby & Craig 1890:16; Braun 1967:37 (illus. p. 38).

HERBARIUM RECORDS: [ca. 1834]—canal at Cols., Lapham (CINC); Jul 1971—SW side of I-270, borrow pit just S of Sunbury Rd. underpass of I-270, Mayhew; 6 & 12 Jun 1991—Antrim Park, drainage ditch & lake, Sharon Twp., Lowden 4654 & 4684; 20 Jun 1991—pond at Big Walnut Park, entrance off Livingston Ave., Truro Twp., Lowden 4706; 6 Jul, 10 Aug & 14 Sep 1992—Pickerington Ponds, just S of Wright Rd. & E of Bowen Rd., Madison Twp., Lowden 4988, 5029 & 5041.

5. †*Potamogeton amplifolius* Tuck.

Large-leaved or Bigleaf Pondweed

Plants with submersed leaves only, lanceolate to ovate, not linear; stipules more than 3 cm long; leaves petioled, falcate-folded, with more than 25 nerves.

HERBARIUM RECORD: 16 Aug 1929—Baumgardner's Pond, Jackson Twp., Thut.

NOTE: Not mapped for Franklin Co. by Braun 1967:30 (illus. p. 29).

6. †*Potamogeton pulcher* Tuck.

Spotted Pondweed

Plants with floating and submersed leaves; floating leaves large, coriaceous, more than 4 cm long; stems and petioles black-spotted; submersed leaves mostly 10-15 cm long, floating leaves rounded to cordate at base.

REFERENCES: Jones 1943:102; Braun 1967:31 (illus. p. 32); Stuckey & Roberts 1977:28 (neither previous to 1900 nor since 1950; quiet, open water of ponds); Stuckey & Roberts 1982:28; McCance 1984:A-23.

HERBARIUM RECORDS: 16 Aug 1929—Baumgardner's Lake, Jackson Twp., Thut; 17 May 1933—Baumgardner's Pond, Chapman.

7. *Potamogeton nodosus* Poir.

Floating Pondweed, Longleaf Pondweed

Plants with floating and submersed leaves; floating leaves well developed, large, more than 4 cm long; petiole uniform throughout, all blades long-petioled, base and apex usually acute; floating blades lance-elliptic, submersed ones lance-linear, often very long.

REFERENCE: Riddell 1834:159 (*Potamogeton fluitans*, standing pools).

HERBARIUM RECORDS: 1890—OSU pond, Cols., Selby; Aug 1890—Cols., Werner (CLM); 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; 16 Jul 1989—Highbanks Metro Park (Delaware Co.), S side of Powell Rd., man-made pond, 1 mi. W of Rt. 23, Morawetz 100; 6 & 24 Jun 1991—Antrim Park, in drainage ditch and lake, Sharon Twp., Lowden 4657 & 4741; 10 Aug 1992—Pickerington Ponds, just S of Wright Rd. & E of Bowen Rd., Madison Twp., Lowden 5027.

NOTE: Not mapped for Franklin Co. by Braun 1967:33 (illus. p. 32).

8. †*Potamogeton natans* L.

Floating Pondweed

Petioles adjacent to leaf blade somewhat contracted, appearing as a joint-like portion, whitish or brownish.

REFERENCES: Riddell 1834:159 (standing pools); Sullivant 1840:46; Selby & Craig 1890:16; Kellerman & Werner 1893:230 (in lagoons near river, 9 Aug 1890).

HERBARIUM RECORD: 30 May 1896—Reservoir Park, M. Wright.

NOTE: Not mapped for Franklin Co. by Braun 1967:28 (illus. p. 29).

9. †*Potamogeton gramineus* L.

Grass-like Pondweed

Syn.: *P. gramineum*, *P. heterophyllum*, *P. heterophyllus* of most authors, not Schreb.

REFERENCE: Riddell 1834:159 (standing pools).

NOTE: Not mapped for Franklin Co. by Braun 1967:30 (illus. p. 32). Perhaps some confusion existed between this species and *Potamogeton foliosus*, since a Lapham specimen (CINC) labeled *P. gramineum* Michx. is *P. foliosus*.

10. †*Potamogeton illinoensis* Morong

Illinois Pondweed

Plants with submersed leaves only; leaves lanceolate, entire, not folded, with less than 20 nerves. Syn.: *P. angustifolius* of authors, not Bercht. & Presl, *P. lucens* of American authors, not L.

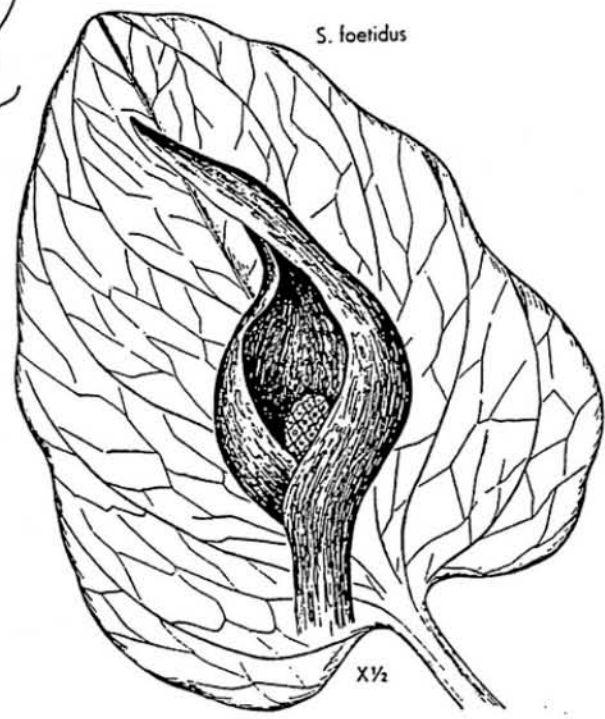
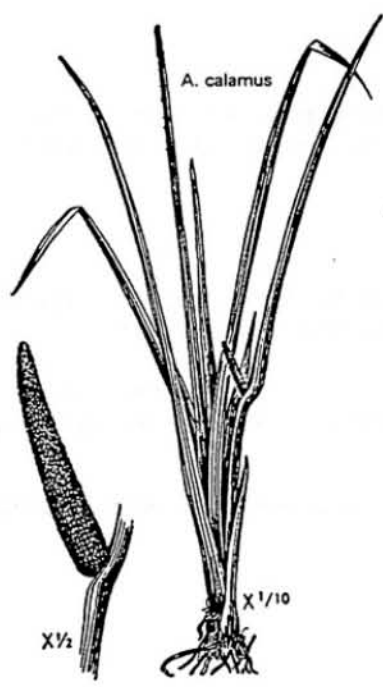
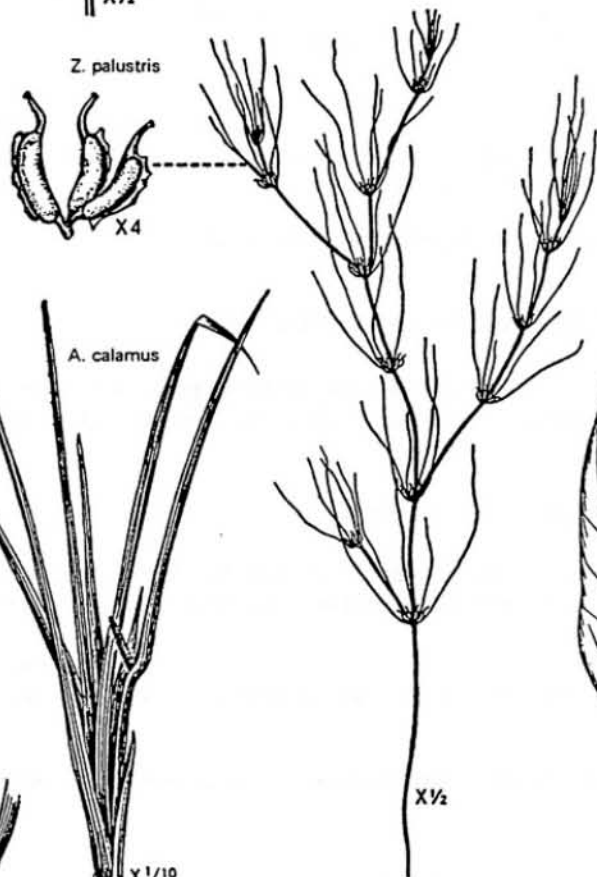
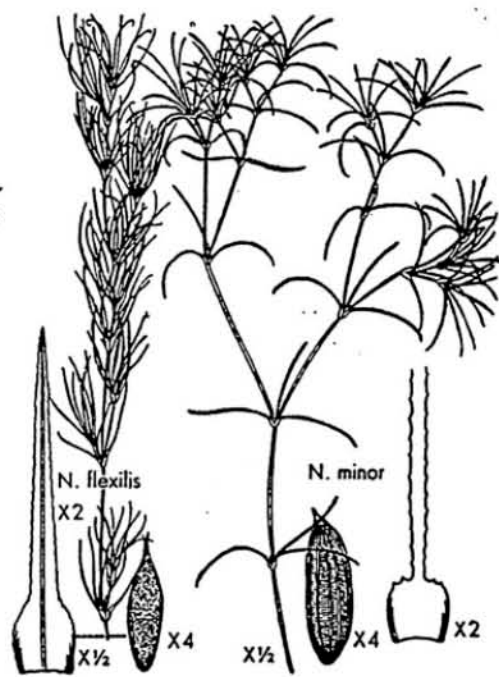
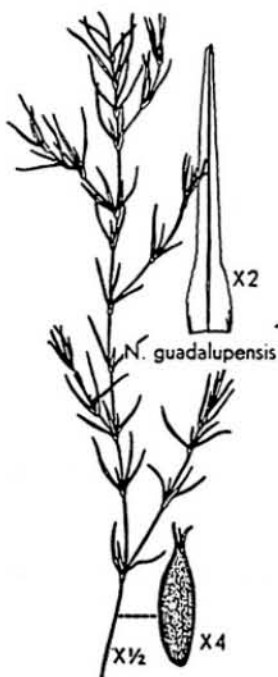
REFERENCES: Jones 1943:101; Braun 1967:31 (illus. p. 32).

HERBARIUM RECORD: 16 Aug 1929—Baumgardner's Pond, Jackson Twp., Thut.

NAJADACEAE, Water-nymph Family

1. NAJAS L. Naiad, Water-nymph

POTAMOGETON
NAJAS
ZANNICHELLIA
ACORUS
SYMPLOCARPUS



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 when 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