



## 2. VALLISNERIA L. Tape-grass, Eel-grass

Rooted in mud, leaves submersed; sepals 3, petals 3; staminate flowers minute, many in a head borne under water, flowers separating at anthesis and floating, stamens usually 2; carpellate flowers epigynous, white, sessile and solitary in a long-peduncled spathe, stigmas 3, these flowers at surface of water at anthesis, fruit under water as a result of coiling of peduncle.

### 1. †*Vallisneria americana* Michx. var. *americana*

Tape-grass, Eel-grass, Wild Celery

Stems short, leaves basal, ribbon-like, up to 2 m long. Syn.: *V. spiralis* of American authors, not L., *V. spiralis* L. var. *americana* Torr.

REFERENCES: Riddell 1834:158; Sullivant 1840:41; Selby & Craig 1890:15; Kellerman & Werner 1893:230 (#394a, quite abundant in the lagoons near the river, 23 Aug 1890); Braun 1967:60 (illus. p. 58).

HERBARIUM RECORD: 21 May 1933—OSU, Hicks.

NOTE: See Lowden 1982:290 (illus. p. 274).

## JUNCAGINACEAE, Arrow-grass Family

Of marshes and bogs; leaves all basal; flowers regular, bisporangiate, small, greenish, in a bractless raceme; sepals and petals 3; stamens 6, attached at base to perianth; carpels 3 or 6, united until mature, separating at maturity, becoming follicles; ovule solitary in each carpel.

### 1. TRIGLOCHIN L. Arrow-grass

Leaves slender, basal, with membranous sheaths; anthers sessile.

a Locules 6; fruit ovoid-ellipsoid, the beaks recurving at maturity. 1. *T. maritimum*

a' Locules 3; fruit linear-clavate, the carpels at maturity separating from base upward, each carpel pointed at base.

2. *T. palustris*

#### 1. †*Triglochin maritimum* L.

Seaside Arrow-grass

Carpels 6; fruit ovoid-ellipsoid, appearing 12-ribbed. Syn.: *T. elatum* Nutt., *T. maritima* L.

REFERENCES: Sullivant 1840:46; Selby & Craig 1890:16.

NOTE: No specimens seen from Franklin Co. Not mapped for Franklin Co. by Braun 1967:47 (illus. p. 46).

#### 2. †*Triglochin palustre* L.

Marsh Arrow-grass

Carpels 3, united until maturity into a linear or club-shaped fruit blunt at apex and narrow at base, upon ripening separating from base upward. Syn.: *T. palustris* L.

REFERENCES: Sullivant 1840:46; Selby & Craig 1890:16.

HERBARIUM RECORD: 1840—Cols., Sullivant.

NOTE: Not mapped for Franklin Co. by Braun 1967:48 (illus. p. 46).

## POTAMOGETONACEAE, Pondweed Family

Aquatic herbs with submersed stems and leaves and sometimes also floating leaves; leaves alternate or the upper opposite; flowers bisporangiate, in peduncled elongate or capitate spikes; perianth none; stamens 4; carpels 4, separate. (Zosteraceae, in part)

### 1. POTAMOGETON L. Pondweed

Some species with only submersed leaves, other species with both submersed and floating leaves; flowers small, perianth none; stamens 4, with a sepal-like appendage; carpels 4, separate, becoming achenes.

a Floating leaves present.

- b Submersed blades linear, not flat, blade and petiole not differentiated; floating blades ovate, 2-4 cm wide, usually shorter than petiole, base often cordate, attachment to petiole curving and flexible; stipules 4-10 cm long. **8. *P. natans***
- b' Submersed blades not linear; floating blades 2-6 cm wide; peduncle often wider than stem.
  - c Petiole and stem black-spotted; submersed blades lanceolate, floating ones ovate to rounded, mostly cordate; stipules to 6 cm long, acuminate. **6. *P. pulcher***
  - c' Submersed blades falcate-folded, lanceolate to ovate; floating ones ovate to elliptic; stipules to 12 cm long, acuminate. **5. *P. amplifolius*** (See c'.)
  - c'' Petiole and stem not black-spotted; submersed blades not falcate-folded.
    - d All blades long-petioled, base and apex usually acute, floating blades lance-elliptic, submersed ones lance-linear, often very long; stipules 4-10 cm long. **7. *P. nodosus***
    - d' Submersed blades sessile or short-petioled, lance-elliptic, margins with deciduous minute teeth; floating blades elliptic to ovate, petioled; stipules obtuse.
      - e Submersed blades 3-10 mm wide; stipules about 2 cm long. **9. *P. gramineus***
      - e' Submersed blades 1.5-4.5 cm wide, sessile or petioles to 4 cm; stipules 4-10 cm long. **10. *P. illinoensis***
- a' Floating leaves not present.
  - f Blades serrate, often ruffled, oblong to broadly linear, more than 4 mm wide, base sessile; fruit 5-6 mm long, beak 2-3 mm long. **2. *P. crispus***
  - f' Blades not serrate, linear, mostly less than 4 mm wide; fruit not as above.
    - g Blades septate (with short cross-veins); stipules connate; flowers in 2-6 whorls; stem freely branched, branches and leaves spreading. **1. *P. pectinatus***
    - g' Blades not septate.
      - h Stipules not connate; blades to 1.5 mm wide, 3-5-nerved, not curved, glands present at base; peduncles to 4 cm long. **3. *P. pusillus***
      - h' Stipules connate; blades to 3.5 mm wide.
        - i Blades 3-5-nerved; spike capitate, peduncle clavate, 1 cm long or less; glands usually present. **4. *P. foliosus***
        - i' Blades 3-nerved, the laterals often obscure; spike cylindrical, interrupted, peduncle usually elongate; glands usually present. **3. *P. pusillus***

**1. *Potamogeton pectinatus* L.**

Fennel-leaved Pondweed, Sago Pondweed

Plants with submersed leaves only; leaves linear, few nerved, leaves very narrow or bristle-like. Syn.: *P. pectinatum*  
REFERENCES: Riddell 1834:159 (standing pool); Selby & Craig 1890:16; Kellerman & Werner 1893:230 (in lagoons near river, 9 Aug 1890).  
HERBARIUM RECORDS: 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 Jun 1991—Antrim Park, lake area, Sharon Twp., *Lowden 4655 & 4658*; 6 Jul, 10 & 22 1992—Pickerington Ponds, wetland wildlife area, just S of Wright Rd. & E of Bowen Rd., Madison Twp., *Lowden 4987, 5030 & 5039*.

NOTE: Not mapped for Franklin Co. by Braun 1967:36 (illus. p. 34).

**2. \**Potamogeton crispus* L.**

Curly-leaf Pondweed

Naturalized (native of Europe)

Plants with submersed leaves only; leaves oblong to broadly linear, blades finely serrate, often ruffled.

REFERENCE: Braun 1967:40 (illus. p. 38).

HERBARIUM RECORDS: Summer 1934—Minerva Park Lake, near Cols., *Chapman*; 3 Oct 1971—Scioto R., common in shallow water at the confluence with the Olentangy R., *Roberts & Phillips 2238*; 6 Jun 1991—Antrim Park, drainage ditch, under entrance bridge, Sharon Twp., *Lowden 4656*.

**3. †*Potamogeton pusillus* L.**

Small Pondweed, Slender Pondweed

Plants with submersed leaves only, leaves linear; blades 3 nerved, the lateral ones obscure; leaves usually with 2 small basal glands. Syn.: *P. berchtoldii* Fieber, *P. berchtoldii* Fieber var. *tenuissimus* (Mert. & Koch) Fernald, *P. panormitanus* Biv., *P. pusillus* var. *tenuissimus*

REFERENCES: Jones 1943:102; Braun 1967:39 (illus. p. 38).

HERBARIUM RECORDS: 16 Aug 1929—Baumgardner's Lake, Jackson Twp., *Thur*; Jul 1971—SW side of I-270, borrow pit just S of Sunbury Rd. underpass of I-270, *Mayhew*; 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 Jun 1991—Antrim Park, drainage ditch, Sharon Twp., *Lowden 4653*.

POTAMOGETON



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

