

ALISMA  
SAGITTARIA  
ELODEA



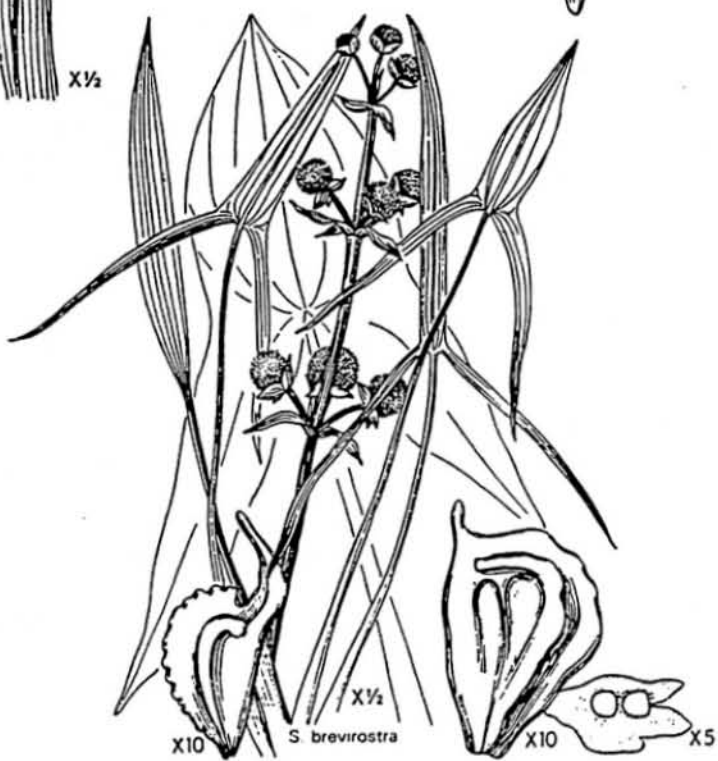
*A. subcordatum*



*S. latifolia*



*S. rigida*



*S. brevisrostra*



*E. canadensis*

The long-acuminate or attenuate bracts of the inflorescence and ascending or recurving beak of the achene distinguish this species from the similar *Sagittaria latifolia*. Leaves with prominent basal lobes. Syn.: *S. engelmanniana* J.G.Sm. var. *brevirostra*

REFERENCE: Braun 1967:55 (illus. p. 54).

HERBARIUM RECORDS: 31 Jul 1882—Olentangy R., *W. Green*; 30 Jul 1883—Olentangy R., University Farm, *Devol*; 12 Sep 1991—E side of Hoover Dam Park, N of entrance off Cubbage Rd., inlet to reservoir, Blendon Twp., *Lowden 4828*.

### 2. *Sagittaria latifolia* Willd.

Common Arrowhead

Distinguished by the broad, ovate, obtuse (rarely acute) bracts in the inflorescence, and by the almost horizontal beak of the achene which points away from the dorsal keel; leaves with prominent basal lobes. Syn.: *S. hastata*, *S. obtusa*, *S. sagittifolia* L., *S. variabilis* Engelm. var. *diversifolia* A.Gray, *S. variabilis* Engelm. var. *gracilis* Engelm., *S. variabilis* Engelm. var. *hastata* Pursh, *S. variabilis* Engelm. var. *latifolia* Willd., *S. variabilis* Engelm. var. *obtusata* Willd.

REFERENCES: Riddell 1834:158 (wet prairies, marshes); Sullivant 1840:44; Craig 1890:54, 106-107 (#421-426; University Farm Sep 1887; vars. are found in the ponds E of the island, 19 Jul 1882, 16 Jun 1887); Selby & Craig 1890:16 (#856-861); Braun 1967:53 (exceedingly variable species) (illus. p. 64).

HERBARIUM RECORDS: 19 Jul 1882—Hayden Falls, *Devol*; 10 Aug 1882—SW of Cols., *W. Green*; 30 Jul 1883—Cols. & Olentangy R., University Farm, *Devol*; 7 Aug 1890—near St. Mary's Convent, *Selby*; 3 Sep 1892—Cols., *Bogue*; 22 Aug 1899—S Cols. & canal near Cols., *Selby*; 5 Aug 1910—Scioto R., Cols., *L. Miller*; 20 Jul 1934—Scioto R., *Blaydes*; 22 Aug 1952—Olentangy R. bank, by Fifth Ave. dam, Cols., *Laufersweiler*; 11 Sep 1971—W of OSU campus along Olentangy R. near Tower Dorms & Battelle, near Battelle, Cols., *Roberts 2046*; 25 May 1986—W campus of OSU, N side of pond, *R. Burnes 44*; Summer 1988—along Big Darby Creek between I-70 & Little Darby Creek, Galloway Quad., *Delong*; Summer 1988—along the Olentangy R., OSU campus, Cols., *Delong*; 18 Sep 1989—Highbanks Metro Park (Franklin Co.), sandbar S of county line in Olentangy R., *Watts 494* (OS, OWU); 9 Aug 1990—S side of Hibbs Rd., 1 mi. E of Rt. 104, Jackson Twp. *Lowden 4540*.

The following variety is distinguished:

†var. *pubescens* (Muhl.) J.G.Sm.

Hairy Arrowhead

Similar to typical *Sagittaria latifolia* except this variety has rachis, bracts, and calyx pubescent.

REFERENCE: McCance 1984:A-32.

HERBARIUM RECORD: [no date]—Cols., *Selby*.

NOTE: Not mentioned for Franklin Co. by Braun 1967:53.

### 3. †*Sagittaria rigida* Pursh

Sessile-fruited Arrowhead

Stem bent at about base of raceme; lowest carpellate flowers sessile or short-pedicelated; leaves submersed or emersed, all or most without basal lobes. Syn.: *S. heterophylla* Pursh, *S. heterophylla* var. *elliptica* Engelm., *S. heterophylla* var. *elliptica* A.Gray

REFERENCES: Craig 1890:107 (#427 & 428, rare; occasionally met with in these ponds, the leaves being usually submerged); Selby & Craig 1890:16 (#854 & 855).

HERBARIUM RECORDS: 9 Aug 1840—Big Walnut, 5 mi. SE of Cols., *J. Paddock Collection* (ILL); 30 Jul 1883—Cols., *Devol*.

NOTE: Not mapped for Franklin Co. by Braun 1967:55 (illus. p. 56).

## HYDROCHARITACEAE, Frog's-bit Family

Submersed aquatics; dioecious; fruit indehiscent; seeds few to many.

a Leaves cauline, whorled or opposite, 1-3 cm long, many. 1. **ELODEA**

a' Leaves basal, alternate, long and ribbonlike. 2. **VALLISNERIA**

### 1. **ELODEA** Michx. Waterweed

Flowers subtended by sessile or nearly sessile spathes; staminate flowers with 3 sepals, 3 petals, and 9 stamens; carpellate flowers epigynous, with 3 sepals, 3 petals, 1-loculed ovary with 3 parietal placentae, and 3 stigmas, these flowers, at anthesis, at surface of water as a result of elongation of hypanthium. (*Anacharis* Rich.)

#### 1. *Elodea canadensis* Michx.

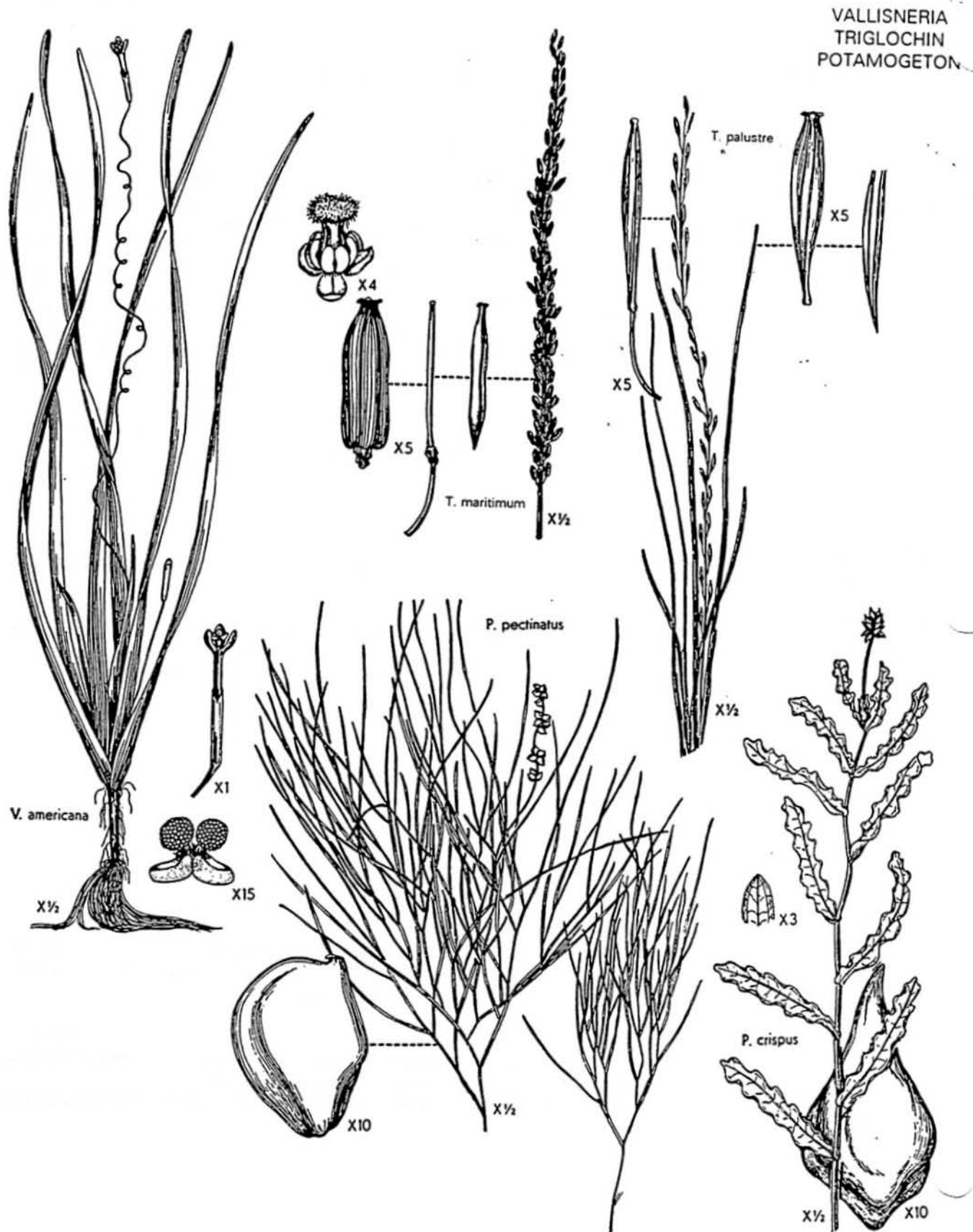
Ditch Moss

Stems leafy; leaves narrow, whorled or opposite, usually obtuse, in width from less than 2 mm to about 4 mm, averaging about 2 mm. Syn.: *Anacharis canadensis* (Michx.) Planch., *Udora canadensis* Nutt.

REFERENCES: Riddell 1834:158 (standing pools); Craig 1890:103 (#393, very abundant in the lagoon E of the island and N of the road, 25 May 1889).

HERBARIUM RECORD: 1840—Cols., *Sullivant*.

NOTE: Not mapped for Franklin Co. by Braun 1967:59.



## 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.