

3. **L. Preissii**, *F. Muell. Fragm.* viii. 217, partly. — Stems and leaves usually still finer than in the two preceding species, the sheathing bases very narrow. Male flowers much the same. Females usually numerous along the stem, the 2 floral leaves at their base with narrow sheaths often scarious at least at the end and the filiform laminae short. Flowers shortly pedicellate within the sheath, the pedicel rarely slightly exceeding it when in fruit. Perianth-segments rather longer than the carpels, narrow but usually striate and whitish or more or less scarious so as to be much more conspicuous than in *L. cylindrocarpa*. Fruit-carpels cylindrical, almost sessile, about 1 line long. Style filiform, longer than the carpel, with an oblong clavate stigma. — *Zannichellia Preissii*, Lehm. in *Pl. Preiss.* ii. 3.

**Victoria.** Lake Wellington and Lake Calvert, *F. Mueller*.

**W. Australia,** *Drummond*, n. 116, 181; Canning River, *Preiss*, n. 1879; north of Stirling Range, *F. Mueller*.

## 2. POTAMOGETON, Linn.

Flowers hermaphrodite. Perianth-segments 4, scale-like, small, broad, contracted at the base or almost stipitate. Stamens 4, inserted at the base of the segments and falling off with them; anthers sessile, broad, the cells opening outwards in longitudinal slits. Carpels 4, distinct; styles short, terminal or the oblique stigmas sessile; ovules solitary in each carpel, laterally attached at or above the middle. Fruit of 4 nutlets or fewer by abortion, somewhat drupaceous, the exocarp membranous or slightly fleshy, the endocarp rather hard, crustaceous. Seed much incurved or horseshoe-shaped, round a clavate or obovoid projection of the endocarp; testa membranous. Embryo the shape of the seed.—Aquatic herbs with a perennial rootstock; stems submerged and floating usually forked and often rooting at the lower nodes. Leaves alternate or rarely opposite, wholly submerged or with

a lamina floating on the surface, dilated at the base into membranous sheathing margins or more frequently the margins more or less detached from and united within the petiole into sheathing stipules often very deciduous. Flowers small, sessile in dense spikes or heads on axillary peduncles.

The genus is dispersed in the fresh or subsaline waters of the greater part of the globe. Of the nine Australian species seven are common in most temperate regions especially in the Old World, another extends over East India and the Malayan Archipelago, and one only is endemic but more nearly allied to American than to Old World species.

Kunth considers the flowers as unisexual, describing the stamens as distinct male flowers and the carpels of the ovary as separate female flowers, a view in which it seems very difficult to concur.

SECTION I.—Leaves all alternate and petiolate with floating laminae, or the lower ones submerged. Stipules connate within the petiole.

Fruit-spikes cylindrical. Seed not forming a complete coil.

Floating leaves usually 2 to 4 in. or longer. Nutlets ovoid, scarcely beaked . . . . .

Floating leaves  $\frac{1}{2}$  to  $\frac{1}{3}$  in. long. Nutlets distinctly beaked . . . . . 1. *P. natans*.

Fruit-heads globular. Nutlets small, not beaked. Seed . . . . . 2. *P. tenuicaulis*

forming a complete coil . . . . . 3. *P. Drummondii*.

SECTION II.—Leaves all submerged, sessile or nearly so, those under the peduncles and branches opposite, the others alternate. Stipules connate within the petiole, often very deciduous.

Leaves stem-clasping, ovate or almost orbicular, many-nerved . . . . .

4. *P. perfoliatus*.

Leaves oblong-lanceolate, many-nerved . . . . .

5. *P. praelongus*?

Leaves narrow-oblong or rarely linear, usually 3-nerved, very obtuse, the margins often undulate-crisped . . . . .

6. *P. crispus*.

Leaves narrow-linear, obtuse or scarcely acute, 1-nerved. Spikes  $\frac{1}{2}$  in. long or more . . . . .

7. *P. obtusifolius*.

Leaves narrow-linear, very acute, 1- or 3-nerved. Spikes short and few-flowered. Seed forming almost a complete coil . . . . .

8. *P. acutifolius*.

SECTION III.—Leaves all submerged, sessile or nearly so with sheathing margins but no distinct stipules.

Leaves narrow-linear, 1-nerved. Stems repeatedly dichotomous . . . . .

9. *P. pectinatus*.

POTAMOGETONACEAE

Potamogeton  
ochreatus

Potamogeton.

Javanicus Hassk.

2. *P. tenuicaulis*, F. Muell. *Fragm.* i. 90, 244, viii. 217.—Perhaps a variety of *P. natans*, with which it is closely connected through the small Tasmanian variety of that species. Stems almost filiform. Floating leaves oblong-elliptical or lanceolate,  $\frac{3}{4}$  to  $1\frac{1}{2}$  in. long, acute at the base, few-nerved. Stipules very thin. Submerged leaves few, linear. Spikes dense, 4 to 6 lines long. Nutlets smaller than in *P. natans*, more distinctly rostrate and the ribs often but not always denticulate.

**N. Australia.** Gulf of Carpentaria, F. Mueller.

**Queensland.** Brisbane River, Bailey; Moreton Bay, Leichhardt; Rockhampton, Dowman, O'Shanesy; Rockingham Bay, Dallachy; Mount Elliot, Fitzalan.

This is evidently the same as the Bengal plant which Indian botanists have referred to the North American *P. hybridus*, Mich. which it closely resembles in habit, foliage, and inflorescence, but the fruit is very different and the seed is not spirally coiled. It may be, as suggested by F. Mueller, the same as *P. javanicus*, Hassk. from Java, and if so, should bear that name, but the character given is insufficient for verification and we have no specimens for comparison.

POTAMOGETONACEAE

Potamogeton

tricarinatus

F.Mu