

about  $\frac{1}{4}$  inch wide on dilated petioles; submersed leaves narrowly linear, about 1 inch long. Submersed flowers one or two on very short peduncles. Emerged spikes  $\frac{1}{4}$  to  $\frac{1}{2}$  inch long, on peduncles of about the same length. Embryo coiled  $1\frac{3}{4}$  times.

2435. *P. FLUITANS*, Roth.

*P. lonchites*, Tuck.

Common in running streams. Floating leaves long-elliptical, 3–6 inches long, acute, long-petioled, 17–23-nerved. Submersed leaves very long, sometimes 12 inches by 1 wide, lanceolate and lance-linear, 7–15 nerved. Coarsely netted. Peduncles somewhat thickened upwards; spike cylindrical, fruit obliquely obovate, 3-keeled, the middle keel winged above. A form with remarkably long stipules and leaves is found at Hull. Whole plant frequently ruddy in colour. *P. rufescens*, Schrad, which has not yet been found here has lenticular fruit, short-petioled floating leaves, and the lower submersed leaves sessile.

2436. *P. AMPLIFOLIUS*, Tuck.

Not uncommon. The Ottawa River at Aylmer, Little Chaudière and East Templeton. Kingsmere and Meech's Lake. A large foliaceous and beautiful species; submersed leaves lanceolate or oval on short petioles with the tips recurved and undulate at the edges, sometimes 7 inches long by 2 wide. Peduncles thickened upwards. Fruit large obovate, 3-keeled with a broad stout beak. Nutlet not impressed on the sides; embryo slightly incurved.

2437. *P. HETEROPHYLLUS*, Schreb.

*P. gramineus*, L. var. *heterophyllus*, Fries

Common and very variable according to the place where it grows. Stem slender, compressed, much branched below; floating leaves mostly thin, variable, rounded or sloping at the base, but with a short blunt point, 10–18-nerved, usually 1–2 inches long by  $\frac{1}{2}$  to  $\frac{3}{4}$  inch wide; submersed leaves linear-lanceolate, 7-nerved on the stem; 3-nerved on the branches; stipules obtuse, loose. Spike  $\frac{3}{4}$ –1 $\frac{1}{4}$  inches long, fruiting freely. When growing on mud, sometimes with only broad coriaceous leaves.

—var. *GRAMINIFOLIUS*, (Fries) Morong.

The flaccid submersed leaves are very long 2–5 inches by 1–3