

3. POTAMOGETONACEAE

Chumsri Chai-anan*

A small family of aquatic herbs. Leaves alternate, the upper most usually opposite, stipulate. Spikes dense or lax, flowers bisexual. Fruit achene. One genus *Potamogeton*.

POTAMOGETON

Linn, Sp. Pl. : 126. 1753.

Submersed, fresh or brackish water herbs. *Leaves* entire, undulate or toothed, floating leaves if present, different from submersed ones. *Flowers* small, perianth 4. *Stamens* 4; anthers sessile or subsessile. *Ovary* superior; carpel 4, free, 1-locular, 1-ovuled, style sessile or subsessile. *Fruit* ovoid, subglobose, often beaked.

One hundred species having a world-wide distribution, only four species found in Thailand.

KEY TO THE SPECIES

- 1. Leaves dimorphic, submersed and floating
 - 2. Submersed leaves narrowly linear, floating leaves not more than 3 cm long.
Vietnam (type) 1. *P. octandrus*
 - 2. Submersed leaves linear lanceolate, floating leaves more than 5 cm long. 2. *P. polygonifolius*
- 1. Leaves not dimorphic, all submersed
 - 3. Leaves, petiolate 3. *P. mucronatus*
 - 3. Leaves, sessile 4. *P. crispus*

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Figure 10. *Potamogeton octandrus* Poir.



Figure 11. แหนปากเบ็ด *Potamogeton polygonifolius* Pourr.

1. **Potamogeton octandrus** Poir. in Lamk., Encycl. Meth. Bot. Suppl. 4:534. 1816. — *P. javanicus* Hassk. in Act. Soc. Ind.-Neerl. 1:26. 1856; Hook. f., Fl. Br. Ind. 6:566. 1893; Prod. Fl. Sudwestafrika: 144. 1966. Figure 10.

Fresh water herbs. Submersed leaves narrowly linear to filiform, 10 by 0.1 cm, similar to stem. Floating leaves elliptic to oblong, 3 by 0.8 cm; petioles 2-3 cm long. Stipules short, up to 1 cm long, membranous, clasping the stem. Flowers yellow. Achenes 3-4 mm long.

T h a i l a n d.—NORTHERN : Chiang mai.

D i s t r i b u t i o n.—North Vietnam (type), Africa, Madagascar, India, Java, China, Formosa, Korea, Japan and Australia.

E c o l o g y.—In pond.

2. **Potamogeton polygonifolius** Pourr., Mem. Acad. Toulouse 3:325. 1788. — *P. oblongum* Viv., Ann. Bot. 1, 2:102. 1802; Engler, Pflanzenr. 31:65. 1907; Hook. f., Fl. Br. Ind. 6:566. 1893. Figure 11.

Fresh water herbs. Submersed leaves membranous, narrowly lanceolate to linear, 8-15 by 1-2 cm. Floating leaves elliptic, oblong, 5-12 by 2-3 cm, apex acute to obtuse, entire, base obtuse; petiole 5-15 cm long. Stipules 2-4 cm long, acute, obtuse. Spike dense, 6-15 cm long. Achenes subglobose, 3 by 2 mm, indistinctly or not keeled.

T h a i l a n d.—NORTHERN : Chiang Mai, Lamphun; NORTHEASTERN : Sakon Nakhon (Nong Han).

D i s t r i b u t i o n.—N. America, Europe, Africa, India, Nepal, Java, China, Japan and New Zealand.

E c o l o g y.—In lake.

V e r n a c u l a r.—Nae paak pet แหนปากเป็ด (Lamphun).

3. **Potamogeton mucronatus** Presl, Epim. Bot. 245. 1849. — *P. malaianus* Miq., Illustr. Fl. Arch. Ind.:46. 1870, Hook. f., Fl. Br. Ind. 6:567. 1893. Figure 12.



Figure 12. *Potamogeton mucronatus* Presl



Figure 13. กก Potamogeton crispus Linn.

Fresh or brackish water herbs. Leaves all submersed, oblong, lanceolate, 6-12 by 1-2 cm, apex mucronate, margins entire or undulate, base acute to obtuse, thin, membranous; petiole 1-5 cm long. Stipules acute 1.5-3.5 cm long. Peduncle stout, thicker than stem. Spike dense 5-10 cm long. Achenes ovoid 2-3 mm long, dorsal keeled.

T h a i l a n d.—NORTHERN : Nan; CENTRAL : Saraburi; PENINSULAR : Phatthalung.

D i s t r i b u t i o n.—India through Indo-China, Malaysia to China and Japan.

E c o l o g y.—In fresh and brackish water up to 300 m. alt.

4. *Potamogeton crispus* Linn., Sp. Pl. : 126. 1753; Hook. f., Fl. Br. Ind. 6 : 566. 1893. Camus in Fl. Gén. I.-C. 6 : 1220. 1942. Figure 13.

Fresh water herbs; stem slender up to 80 cm long. Leaves all submersed, sessile, linear to oblong, 25-80 by 5-10 mm, rounded, obtuse at apex, margins undulate or toothed, rounded at base. Stipules short up to 4 mm long, caducous. Peduncle 3-6 cm long. Spike lax up to 1 cm long. Achenes ovoid, 2-3 mm long.

T h a i l a n d.—NORTHERN : Nan; EASTERN : Ubon Ratchathani.

D i s t r i b u t i o n.—Cosmopolitan (type Europe, Sweden ?).

E c o l o g y.—In brooks or ponds, at low altitudes.

V e r n a c u l a r.—Naen นาน (Nan).

INDEX TO COLLECTOR'S NUMBERS

KARNCHANOMAI s.n. 47586 : 1.

KERR 4874, 21531 : 4; 5018, 15141 : 3; 6260 : 1.

SMITINAND s.n. : 1.

SMITINAND & ST. JOHN 6862 : 3.

TSANG, W.T. 29468 : 2.