

2. TRAPELLA Oliver in J. D. Hooker, Icon. Pl. 14: pl. 1595. 1887.

茶菱属 cha ling shu

Herbs aquatic. Floating leaves triangular-rounded to cordate, submersed ones lanceolate. Flowers solitary, axillary, mostly submersed and cleistogamous. Calyx teeth 5; tube adnate to ovary. Corolla funnelform, bilabiate; lowest lobe longest, upper 2 forming inconspicuous lip. Stamens 2, included, basally adnate to corolla tube. Ovary inferior, 2-locular, 1 locule reduced, another with 2 ovules. Stigma 2-lobed. Fruiting pedicel nodding. Fruit indehiscent, narrow and long, with 5 hooklike or spiny appendages below calyx lobes, sometimes with 3–5 longitudinal wings. Seeds 1.

One or two species: China, Japan, Korea, Russia (Far East); one species in China.

The genus is sometimes placed in its own family (Trapellaceae, especially if Martyniaceae is separated from the Pedaliaceae).

1. *Trapella sinensis* Oliver in J. D. Hooker, Icon. Pl. 14: pl. 1595. 1887.

茶菱 cha ling

Rhizomes horizontal. Stems green, slender, to 60 cm. Leaves opposite, glabrous adaxially, pale purple-red abaxially; petiole 1.5–3 cm; floating leaves 2.5–3 cm wide, apex obtuse-acute; submersed leaves 3–5 cm × 5–7 mm. Pedicel 1–3 cm, elongated at anthesis. Calyx teeth ca. 2 mm, persistent. Corolla pale red, 1–3 × 2–3.5 cm; lobes rounded. Filaments ca. 1 cm; anthers 2-locular, spreading. Fruit with 3 hooklike appendages to 7 cm and 2 erect spines 0.3–2 cm. Fl. Jun. $2n = 50$.

Ponds, lakes; to 300 m. Anhui, Fujian, Guangxi, Hebei, Heilongjiang, Hubei, Hunan, Jiangsu, Jiangxi, Jilin, Liaoning [Japan, Korea, Russia (Far East)].