

3. CALDESIA Parlatore, Fl. Ital. 3: 598. 1860.

泽薹草属 ze tai cao shu

Herbs, aquatic, perennial, rhizomatous. Leaves all basal, aerial, floating, or submerged, ovate to elliptic; floating leaves deep green, large; aerial leaves subleathery, with erect petiole; submerged leaves usually smaller. Inflorescences paniculate or racemose, much branched; branches whorled, each whorl with 3–6 branches; bracts lanceolate. Flowers pedicellate, verticillate, bisexual. Petals usually larger than sepals. Stamens 6–12. Carpels few to numerous in a single whorl, free, each with 1 ovule. Fruitlets drupaceous, with woody endocarp and spongy exocarp, swollen or slightly compressed, with a short beak.

About three species: Africa, Asia, Australia, Europe; two species in China.

- 1a. Leaves longer than broad, apex obtuse, not ribbed, base deeply cordate; stamens 6 ..... 1. *C. parnassifolia*  
1b. Leaves shorter than broad, apex notched, ribbed, base not cordate; stamens 9–12 ..... 2. *C. grandis*

1. *Caldesia parnassifolia* (Bassi ex Linnaeus) Parlatore, Fl. Ital. 3: 599. 1860.

泽薹草 ze tai cao

*Alisma parnassifolium* Bassi ex Linnaeus, Syst. Nat., ed. 12, 3: 230. 1768; *A. parnassifolium* var. *majus* Micheli; *A. reniforme* D. Don; *Caldesia parnassifolia* var. *major* (Micheli) Buchenau; *C. reniformis* (D. Don) Makino; *Echinodorus parnassifolius* (Bassi ex Linnaeus) Engelman.

Rhizomes creeping. Petiole 5–100 cm; leaf blade ovate or elliptic, 2–10 × 1.5–7 cm, veins 9–15, base cordate to deeply so, apex obtuse. Scapes erect or not, 30–125 cm high; inflorescences paniculate, 20–35 cm. Flowers 3-verticillate; pedicels 2.5–4 cm. Sepals persistent, ovate, 3.5–5 × 2–3 mm. Petals ovate, larger than sepals. Stamens 6. Carpels 5–10, laterally compressed; style 2(–4) mm, slender. Fruitlets obovoid, ca. 3 × 2 mm, with 3–5 longitudinal ribs abaxially and an erect beak. Fl. and fr. May–Oct.  $2n = 22^*$ .

Lakes, ponds, marshes. Heilongjiang, Hunan, Jiangsu, Nei Mongol, Shanxi, Yunnan, Zhejiang [India, Japan, Korea, Nepal, Pakistan, Russia, Thailand, Vietnam; Africa, Australia, Europe].

2. *Caldesia grandis* Samuelsson, Svensk Bot. Tidskr. 24: 116. 1930.

宽叶泽薹草 kuan ye ze tai cao

Rhizomes erect. Petiole 15–55 cm; leaf blade suborbicular, 4.5–7 × 6–8 cm, veins 9–12, base usually subtruncate, apex notched, ribbed. Scapes erect, 30–60 cm high; inflorescences paniculate. Flowers 3-verticillate; pedicels 1.2–2 cm. Sepals persistent, reflexed, elliptic to broadly ovate, 3–4 mm. Petals reflexed, white, spatulate or subobovate, 6–7 mm. Stamens 9–12. Carpels usually 15–17; style ca. 1.5 mm, slender. Fruitlets subobovoid, ca. 2 mm, with 3–5 longitudinal ribs abaxially and an erect beak. Fl. and fr. Jul–Sep.  $2n = 22^*$ .

Lakes, marshes. Guangdong, Hubei, Hunan, Taiwan, Yunnan [Bangladesh, India, Malaysia].

Fl. China 23: 87. 2010.