

41. BOEA Commerson ex Lamarck, Encyl. Méth., Bot. 1: 401. 1785.

旋蒴苣苔属 xuan shuo ju tai shuo

Dorcoceras Bunge.

Herbs, perennial, epipetric or terrestrial, rhizomatous, stemless [or stemmed]. Leaves few to many, along stem, then opposite, sometimes spirally arranged or basal (in China), equal to subequal in a pair; leaf blade villous to puberulent, hairs unicellular, long, seldom short or glandular, base attenuate to cordate. Inflorescences lax, axillary, sometimes umbel-like, 1- to many-flowered cymes; bracts 2, opposite. Calyx actinomorphic, 5-sect from near base, rarely 5-lobed from middle; segments equal to slightly unequal. Corolla white, blue, or purple, zygomorphic, inside densely puberulent or glandular puberulent to glabrous, outside campanulate to broadly campanulate, not swollen, longer than to nearly equalling limb, 4–10 mm in diam.; limb distinctly or indistinctly 2-lipped; adaxial lip 2-lobed, shorter than abaxial lip; abaxial lip 3-lobed, lobes equal or subequal, apex rounded. Stamens 2, adnate to abaxial side of corolla tube near base, included; anthers dorsifixed, coherent, thecae divaricate, confluent at apex, dehiscing longitudinally from arcuate slits; connective not projecting; staminodes 2 or 3, adnate to adaxial side of corolla tube. Disc inconspicuous. Ovary oblong, 1-loculed; placentas 2, parietal, projecting inward, 2-cleft. Stigma 1, terminal, capitate, undivided. Capsule straight in relation to pedicel, narrowly oblong, much surpassing calyx, dehiscing loculicidally to base; valves 2, spirally twisted. Seeds unappendaged.

About 20 species: Australia, China, E India, Malaysia, Myanmar, Philippines, Polynesia, Vietnam; three species in China.

1a. Corolla 1.4–2.2 cm; calyx 5-lobed from middle, 6–9 mm; petiole to 10 cm 3. *B. clarkeana*

1b. Corolla 0.7–1.3 cm; calyx 5-sect from near base, 1.5–3 mm; petiole to 1 cm.

2a. Leaf venation pinnate, distinct midrib; blade obovate to narrowly elliptic-spatulate or rhombic, 1.5–5(–8) × 1–2(–3) cm, base attenuate to cuneate; corolla purplish to dark red or white 1. *B. philippensis*

2b. Leaf venation palmate, midrib indistinct; blade suborbicular to ovate, 0.7–7 × 0.5–5.5 cm, base cuneate to truncate; corolla blue-purple or blue to white or pink 2. *B. hygrometrica*

1. *Boea philippensis* C. B. Clarke in A. & C. de Candolle, Monogr. Phan. 5: 146. 1883.

地胆旋蒴苣苔 di dan xuan shuo ju tai

Boea elephantopoides W. Y. Chun; *Dorcoceras philippense* (C. B. Clarke) Schlechter.

Petiole to 1 cm; leaf blade obovate to narrowly elliptic-spatulate or rhombic, 1.5–5(–8) × 1–2(–3) cm, adaxially grayish villous to pubescent, abaxially densely villous, base attenuate to cuneate, margin subentire to irregularly serrate or crenate-serrate, apex acute to rounded; venation pinnate, lateral veins 3 or 4 on each side of midrib. Peduncle (4–)6–13 cm, sparsely villous to glandular puberulent; bracts narrowly oblong, 1.5–3.5 mm. Calyx 5-sect from near base; segments narrowly lanceolate, 1.5–2.5 × ca. 0.5 mm, outside sparsely glandular pubescent, inside sparsely puberulent. Corolla purplish to dark red or white, 7–10 mm, outside puberulent, inside glabrous; tube ca. 5 × 4–6 mm; adaxial lip lobes 2–3 mm; abaxial lip lobes 2.5–5 mm. Filaments 1–1.5 mm, glabrous; staminodes 2. Pistil ca. 6 mm; ovary 3–4 mm; glandular puberulent. Style glabrous. Capsule 2–3.5 cm. Fl. May–Jun, fr. May–Jul.

Shady and damp rocks in forests; 100–800 m. Guangdong, Guangxi, Guizhou, Hainan, Hunan [Philippines, Vietnam].

2. *Boea hygrometrica* (Bunge) R. Brown, On Cyrtandreae 120. 1839.

旋蒴苣苔 xuan shuo ju tai

Dorcoceras hygrometrica Bunge, Enum. Pl. China Bor. 54. 1833.

Petiole to 0.5 cm; leaf blade suborbicular to ovate, 0.7–7 × 0.5–5.5 cm, adaxially white villous to sparsely villous, abaxially densely white to brownish woolly, base cuneate to truncate, margin denticulate or dentate to crenulate, apex rounded to obtuse; venation palmate, nearly parallel, veins 3–9. Peduncle (1–)4–12 cm, puberulent to pubescent; bracts linear to lanceolate, ca. 1–3 mm. Calyx 5-sect from near base; segments narrowly triangular to narrowly lanceolate, 1.5–3 × 0.6–1 mm, outside puberulent, inside glandular puberulent. Corolla blue-purple or blue to white or pink, 0.8–1.3 cm, outside sparsely puberulent, inside sparsely to densely glandular puberulent, especially near base; tube ca. 5 × 6 mm; adaxial lip lobes ca. 4 mm; abaxial lip lobes 5–6 mm. Filaments ca. 1 mm, glabrous to puberulent; staminodes 3. Pistil 7–10 mm; ovary 3–5 mm; pubescent to puberulent. Style glabrous. Capsule 1.1–3.5(–5) cm. Fl. Apr–Aug, fr. Apr–Sep.

• Rocks in valleys, slopes, forests; 100–1500 m. Anhui, Fujian, N Guangdong, Guangxi, Hebei, Henan, Hubei, Hunan, Jiangxi, SW Liaoning, Shaanxi, Shandong, Shanxi, Sichuan, Yunnan, Zhejiang.

3. *Boea clarkeana* Hemsley in F. B. Forbes & Hemsley, J. Linn. Soc., Bot. 26: 232. 1890.

大花旋蒴苣苔 da hua xuan shuo ju tai

Boea densihispidula S. B. Zhou & X. H. Guo; *B. mairei* H. Léveillé; *Streptocarpus clarkeanus* (Hemsley) Hilliard & Burtt.

Petiole to 10 cm; leaf blade ovate to broadly ovate, elliptic, or obovate, 2–10 × 1.4–7 cm, white to gray or yellowish appressed pubescent, base often oblique, broadly cuneate to cordate, margin crenate to serrate, apex acute to rounded; venation pinnate, lateral veins 5–7 on each side of midrib. Peduncle 3–18 cm, grayish puberulent to pubescent; bracts broadly ovate to narrowly ovate, 4–9 mm. Calyx 6–9 mm, 5-lobed from middle; lobes triangular or oblong to ovate-oblong, 3–4 × 2–2.5 mm, outside puberulent, inside glabrescent to puberulent and glandular puberulent. Corolla white to blue or blue-purple, 1.4–2.2 cm, outside glabrescent to densely pubescent to short villous, inside glandular puberulent to glabrescent; tube 1–1.5 × 0.7–1 cm; adaxial lip lobes 3–5 mm; abaxial lip lobes 4–5 mm. Filaments ca. 7 mm, glabrous to glandular puberulent toward anther; staminodes 2 or 3. Pistil 0.9–1.6 cm; ovary 5–8 mm; brownish puberulent to glandular puberulent. Style glandular puberulent to glabrous. Capsule 1.8–4.5 cm. Fl. Jun–Aug, fr. Jun–Oct.

- Crevices of rocks on slopes; 500–3100 m. Anhui, Hubei, Hunan, Jiangxi, S Shaanxi, Sichuan, NW Yunnan, Zhejiang.

