## 130. CALLOSTYLIS Blume, Bijdr. 340. 1825.

美柱兰属 mei zhu lan shu

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Tylostylis Blume.

Herbs, epiphytic. Rhizome stout, creeping, covered by sheaths. Stems well spaced on a stout rhizome, or tufted, short to elongate, pseudobulbous, thick, somewhat clavate and consisting of only a few internodes, or terete and with many internodes, base loosely covered by dried sheaths, leafy mostly in upper part. Leaves 2–5, distichous, arising from nodes at apex of pseudobulb, suberect, conduplicate, leathery. Inflorescences axillary, short, with many flowers opening in succession, erect or spreading, axis covered by short, dense, stellate hairs. Flowers resupinate or not resupinate, usually cream-colored to orange-yellow, often with a dark brown lip, medium-sized, pubescent. Sepals with dense brown stellate hairs abaxially; dorsal sepal free, elliptic or elliptic-ovate; lateral sepals obliquely triangular, ventrally broadened at base, adnate to much elongated column foot forming a long, distinct mentum. Petals free, oblong, smaller than sepals, narrow; lip entire, articulate to column foot, closely pressed to column and column foot, often expanding at base or folded in such a way as to form a pouch. Column curving, short, foot at right angles to column, often somewhat sigmoid, shorter or longer than column, with an apical fleshy swelling; pollinia 8, obliquely shortly clavate, ± equal in shape and size.

Five or six species: China, Himalayan region, India, Indonesia, Laos, Malaysia, Myanmar, Thailand, Vietnam; two species in China.

- 1a. Pseudobulbs remote, 6–16 cm, clavate to flask-shaped, 4 or 5 leaved; lip 3.5–4 × 2–3 mm, margin in distal 1/3 usually strongly recurved giving it a pentagonal appearance when viewed from above; callus round, entire ......... 1. *C. rigida*

## 1. Callostylis rigida Blume, Bijdr. 341. 1825.

## 美柱兰 mei zhu lan

Callostylis rigida subsp. discolor (Lindley) Brieger; Eria discolor Lindley; E. elongata Blume; E. pendula Ridley; E. pholidotoides Gagnepain; E. rigida H. G. Reichenbach (1857), not Blume (1856); Tylostylis discolor (Lindley) J. D. Hooker; T. rigida (Blume) Blume.

Rhizome creeping, 4–8 mm in diam., with internodes 1–2 cm and cylindric sheaths 1-1.5 cm. Pseudobulbs shiny, ± oblong-fusiform or narrowly fusiform, 6–16 × 2–3 cm, distally 4or 5-leaved. Leaf blade glossy, suboblong or narrowly elliptic,  $12-17 \times 2.4-4.3$  cm, leathery, base contracted into a short petiole, apex unequally bilobed. Inflorescences often 2-4, racemose, 1.5-4.5 cm, more than 10-flowered; peduncle 2.5-3.5 cm, shortly brown tomentose; floral bracts reflexed, suborbicular or broadly ovate, 3–4 mm, both surfaces shortly tomentose. Flowers greenish vellow, 1.2-1.5 cm in diam.: sepals with grayish brown hairs abaxially and sparsely white pubescent adaxially; lip brown; column foot with a dark purple callus. Dorsal sepal elliptic,  $8-10 \times 4-5$  mm, obtuse; lateral sepals slightly shorter and broader. Petals narrowly elliptic-obovate,  $7-8 \times 3.5-4$  mm; lip  $\pm$  broadly cordate or broadly ovate, 3.5-4 × 2–3 mm, mucronate, with a cushionlike callus in basal half. Column curved forward at right angle. Capsule narrowly oblong, 3–4 cm  $\times$  6–9 mm, with 6 longitudinal ribs,  $\pm$  hairy. Fl. and fr. May–Jun. 2n = 20, 40.

Epiphytic on trees in mixed forests; 600–1700 m. S Yunnan [India, Indonesia, Laos, Malaysia, Myanmar, Thailand, Vietnam].

## 2. Callostylis bambusifolia (Lindley) S. C. Chen & J. J. Wood, comb. nov.

竹叶美柱兰 zhu ye mei zhu lan

Basionym: *Eria bambusifolia* Lindley, J. Proc. Linn. Soc., Bot. 3: 61. 1858; *Cylindrolobus bambusifolius* (Lindley) Brieger; *Pinalia bambusifolia* (Lindley) Kuntze.

Stems tufted, terete, 20-70(-90) cm, 3-7(-25) mm in diam., with many internodes and leaves. Leaves distichous, mostly on upper part of stem; blade narrowly lanceolate,  $10-22 \times 1-3$  cm, papery, base with a long amplexicaul sheath, apex acuminate. Inflorescences 2-7, arising from near apex of stem, opposite to leaves, 10-22 cm; rachis usually zigzag, base often with 2 or 3 sterile bracts; rachis, pedicel, ovary, and abaxial surface of floral bracts and sepals densely grayish brown hairy; floral bracts reflexed, obovate-oblong or subrhombic, ca. 5 mm, adaxially sparsely hairy. Flowers white, with brownish red veins; pedicel and ovary 1-4 cm. Dorsal sepal oblong-lanceolate, ca.  $12 \times 3$  mm, obtuse; lateral sepals obliquely oblong-lan-

ceolate, ca.  $10 \times 5$  mm, obtuse. Petals oblong-lanceolate, ca.  $11 \times 2.5$  mm, obtuse; lip ovate-oblong in outline, ca.  $10 \times 5$ -6 mm, subentire; lateral lobes rudimentary, base and apex  $\pm$  thickened, mucronate, base with an upcurved claw ca. 2 mm; disk brownish red, with 3 densely white pubescent lamellae extending from base to apex, lamellae thickened at base, distally becoming thinner and disappearing. Column ca. 8 mm (including anther cap), with a wing ca. 1 mm wide on either side. Fl. Dec. 2n = 38.

Epiphytic on tree trunks in forests; 900-1200~m. Guangxi, S Yunnan [NE India, Myanmar, Thailand, Vietnam].

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