

## 128. TRICHOTOSIA Blume, Bijdr. 342. 1825.

毛鞘兰属 mao qiao lan shu

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Herbs, epiphytic, lithophytic, or rarely terrestrial. Stems long or short, leafy throughout except at base, usually throughout with reddish brown, rarely white, hispid hairs, sometimes hairs restricted to leaf sheaths and inflorescences. Inflorescences lateral, from any node, piercing leaf sheath, short and few flowered, or long, pendulous, and many flowered; floral bracts at right angles to rachis, large, concave, hairy. Flowers resupinate, not opening widely, small to medium-sized. Sepals red hairy abaxially, lateral sepals adnate to column foot forming a mentum. Lip entire to obscurely 3-lobed; disk with or without keels, sometimes papillose. Column with a foot; pollinia 8.

About 50 species: from mainland Asia through SE Asia to New Guinea and the Pacific islands; four species (one endemic) in China.

- 1a. Stems creeping, less than 4 cm; inflorescence 1-flowered ..... 4. *T. dasyphylla*
- 1b. Stems erect or pendulous, usually longer; inflorescence 1–6-flowered.
  - 2a. Stems pendulous, more than 20 cm, new growth pale hirsute, old growth brown hispid; leaves 10–18 mm wide; inflorescence 3–6-flowered; flowers white, flushed pink ..... 1. *T. pulvinata*
  - 2b. Stems erect, 3–12 cm, white hirsute; leaves 3–5 mm wide; inflorescence 1-flowered; flowers yellowish green or yellow.
    - 3a. Lip with 2 purple central calli ..... 2. *T. dongfangensis*
    - 3b. Lip with an abaxial conical apical callus ..... 3. *T. microphylla*

**1. *Trichotosia pulvinata*** (Lindley) Kraenzlin in Engler, Pflanzenr. 50(IV. 50. II. B. 21): 138. 1911.

高茎毛鞘兰 gao jing mao qiao lan

*Eria pulvinata* Lindley, J. Proc. Linn. Soc., Bot. 3: 56. 1858; *E. rufinula* H. G. Reichenbach; *Pinalia pulvinata* (Lindley) Kuntze; *P. rufinula* (H. G. Reichenbach) Kuntze; *Trichotosia rufinula* (H. G. Reichenbach) Kraenzlin.

Plants reddish brown tomentose. Stem pendulous, cylindrical, often to 50–100 cm, 6–8 mm in diam., with many nodes, internodes ca. 2 cm. Leaves alternate along stem, lanceolate or oblong-lanceolate, oblique, 6–10 × 1–1.8 cm, both surfaces reddish brown tomentose, sheathing at base, apex acuminate; sheaths 1.5–2 cm, reddish brown tomentose, amplexicaul. Inflorescence borne above middle of stem, arising opposite leaves, ca. 2 cm, 3–6-flowered; floral bracts ovate-lanceolate, 5–6 mm, reddish brown tomentose abaxially. Flowers white, flushed pink; pedicel and ovary ca. 6 mm. Sepals reddish brown tomentose abaxially; dorsal sepal oblong, ca. 10 × 3 mm, obtuse; lateral sepals ovate-triangular, oblique, ca. 10 × 4 mm. Petals lanceolate, ca. 8 × 2 mm, glabrous, obtuse; lip subspatulate in outline, ca. 13 × 4 mm, entire, margin reflexed; disk with an elongate pulvinate callus toward apex. Column ca. 4 mm, apex slightly dilated; foot ca. 5 mm. Capsule ellipsoid, ca. 1 cm × 5 mm, hirsute. Fl. Mar, fr. next Jul.

Lithophytic on rocks in forests; 1200–2000 m. S Guangxi, S Yunnan [Cambodia, India, Laos, Malaysia (Peninsular), Myanmar, Thailand, Vietnam].

**2. *Trichotosia dongfangensis*** X. H. Jin & L. P. Siu, Ann. Bot. Fenn. 41: 465. 2004.

东方毛鞘兰 dong fang mao qiao lan

Rhizome creeping, branching, ca. 1.5 mm in diam. Stems borne ca. 1 cm apart, 3–8 cm, bearing 5–7 leaves closely arranged in 2 rows. Leaves fleshy, oblong to lanceolate, ca. 10

× 5 mm, acuminate, blade and sheath densely covered with white hairs. Inflorescence lateral, 1-flowered; peduncle ca. 4 mm; floral bracts 4, subulate, 1–3 × ca. 1 mm, hairy. Flower yellowish green; pedicel and ovary ca. 1 mm. Sepals coarsely hairy abaxially; dorsal sepal narrowly elliptic, ca. 3 × 2 mm, obtuse; lateral sepals obliquely triangular, ca. 5 × 3 mm, truncate. Petals lanceolate, ca. 2.5 × 1.5 mm, glabrous, acute; lip fleshy, entire, tongue-shaped, ca. 7 × 3 mm, rounded, shortly hairy, slightly concave at base, with a subglobose basal callus and 2 purple calli at center. Column subterete, ca. 1.2 mm, foot ca. 4 mm. Fl. Oct–Nov.

• Epiphytic on tree trunks in tropical montane evergreen forests; 1300–1500 m. Hainan (Dongfang).

**3. *Trichotosia microphylla*** Blume, Bijdr. 343. 1825.

小叶毛鞘兰 xiao ye mao qiao lan

*Eria microphylla* (Blume) Blume; *Pinalia microphylla* (Blume) Kuntze.

Plants 4–6 cm tall, white hirsute. Rhizome long, slender. Stems ± tufted or 1–1.5 cm apart, erect, cylindrical, 4–12 cm, ca. 2 mm in diam., covered with leaf sheaths. Leaves 10–12, alternate, fleshy; leaf blade narrowly elliptic or oblanceolate, 8–17 × 3–5 mm, both surfaces hirsute, apex obtuse. Inflorescence arising from upper portion of stem, opposite a leaf, 1-flowered;

peduncle covered by 1 or 2 sheaths; floral bracts densely arranged, lanceolate, ca. 6 mm, covered with long hairs, acuminate. Flowers yellow; pedicel and ovary ca. 3 mm, covered with long hairs. Sepals white hirsute abaxially; dorsal sepal ovate, ca.  $3 \times 1.5$ –2 mm, obtuse or acuminate; lateral sepals oblong, ca.  $5 \times 3$  mm, obtuse; mentum ca. 4 mm. Petals oblong, ca.  $2.5 \times 1.5$  mm, rounded, glabrous; lip subobovate-oblong, ca.  $5 \times 2.5$  mm, slightly contracted near middle, abaxially hirsute, base connected at a right angle with column foot, margin entire, apex obtuse or subtruncate; disk with 5 lamellae extending from base to near apex, near middle with a purple ellipsoid callus on either side. Column ca. 1.5 mm; thickened; foot ca. 4 mm. Capsule ellipsoid-cylindric, ca.  $6 \times 2.5$  mm, densely white hirsute; fruiting pedicel ca. 2 mm. Fl. Apr–Jun, fr. Nov.  $2n = 24 + 5B, 24 + 9B$ .

Epiphytic on tree trunks in forests; 1000–1500 m. Hainan, S Yunnan [Indonesia, Malaysia, Thailand, Vietnam].

**4. *Trichotosia dasyphylla*** (E. C. Parish & H. G. Reichenbach) Kraenzlin in Engler, Pflanzenr. 50(IV. 50. II. B. 21): 138. 1911.

瓜子毛鞘兰 *gua zi mao qiao lan*

*Eria dasyphylla* E. C. Parish & H. G. Reichenbach, Trans. Linn. Soc. London 30: 147. 1874; *Pinalia dasyphylla* (E. C. Parish & H. G. Reichenbach) Kuntze.

Plants 2–3 cm tall, grayish white hirsute, with  $\pm$  tufted rhizomes. Stem very short. Leaves 2–5, tufted, petiolate, elliptic or obovate-cuneate,  $10$ – $15 \times 4$ – $6$  mm, fleshy, apex obtuse; petiole 3–4 cm, running down to a trumpet-shaped basal sheath. Inflorescence axillary, with a solitary flower; peduncle 5–10 mm, with 2 trumpet-shaped basal sheaths; floral bracts persistent, ca. 2 mm, acuminate. Flowers pale yellow; pedicel very short. Sepals with dense long white hairs abaxially; dorsal sepal ovate-lanceolate,  $3$ – $4 \times 1$ – $2$  mm, obtuse; lateral sepals obliquely triangular,  $5$ – $6 \times ca. 4$  mm, obtuse; mentum ca.  $4 \times 2$  mm. Petals oblong,  $3$ – $4 \times ca. 1$  mm, abaxially with dense white long hairs, apex obtuse; lip obovate-oblong,  $5$ – $6 \times ca. 3$  mm, slightly contracted at middle, thickened, abaxially with white long hairs, margin ciliate, apex subtruncate, with 2 suboblong calli on both sides, with a slightly thickened area between calli. Column ca. 1.5 mm; foot ca. 4 mm. Capsule obovoid-cylindric,  $5$ – $6 \times$  nearly 3 mm, with white long hairs. Fl. Jun–Sep.

Epiphytic on trees; 900–1600 m. S and SW Yunnan [India, Laos, Myanmar, Nepal, Thailand, Vietnam].

