# 123. CYLINDROLOBUS Blume, Fl. Javae Praef. vi. 1828.

柱兰属 zhu lan shu

## Chen Xinqi (陈心启 Chen Sing-chi), Luo Yibo (罗毅波); Jeffrey J. Wood

Ceratium Blume, Bijdr. 342. 1825, not Schrank (1793), nor Albertini & Schweinitz (1805).

Herbs, epiphytic or rarely terrestrial. Stems elongate, slender, usually not pseudobulbous, but in some species a few terminal internodes sometimes slightly swollen, with leaves along entire length, except for a few nodes at base where persistent leaf sheaths are found, or with only a few leaves toward apex. Leaves alternate, conduplicate, linear-oblanceolate, narrowly elliptic, or narrowly ovate, leathery, articulate to a sheathing leaf base tightly enveloping stem. Inflorescences lateral on many nodes or arising from terminal node of stem, usually short and slender, only 1- or a few flowered; peduncle usually very much reduced; floral bracts few, spirally arranged, in some species conspicuous, brightly colored, fleshy. Flowers mostly white or cream-colored, sometimes ochre-yellow, medium-sized, glabrous or sparsely stellate-hairy on abaxial surface of sepals; pedicel and ovary glabrous. Dorsal sepal free, often recurved; lateral sepals oblique at base, forming with column foot a blunt, oblique mentum. Petals free, smaller than sepals; lip 3-lobed, hinged to column foot, curved, adorned with a papillose, subglobose callus and papillose keels, or only with laminate keels; lateral lobes erect, enclosing column; mid-lobe in most species smaller than lateral lobes. Column short, foot shorter than or ca. as long as column proper; pollinia 8, rectangular, arranged in a series of pairs, 1 large and 1 small, posterior 4 much smaller.

About 30 species: SW China, Indochina, Indonesia, Malaysia, Myanmar, Philippines, Thailand; three species (one endemic) in China.

1a. Stems slender, terete, not fleshy, 1–2 mm in diam.; lip ca. 3.5 mm
1b. Stems stout, clavate, fleshy, 2-6 mm in diam.; lip nearly 1 cm.
2a. Lip yellow
2b. Lip lateral lobes with purple edges, mid-lobe with lighter purple edges and patch

1. Cylindrolobus tenuicaulis (S. C. Chen & Z. H. Tsi) S. C. Chen & J. J. Wood, comb. nov.

### 细茎柱兰 xi jing zhu lan

Basionym: *Eria tenuicaulis* S. C. Chen & Z. H. Tsi, Guihaia 15: 109. 1995 [*"tennicaulis"*]; *E. gracilicaulis* S. C. Chen & Z. H. Tsi (1988), not Kraenzlin (1910).

Rhizome often slightly flexuous. Stem  $\pm$  flexuous, terete, 1–2 mm in diam., noded, usually with 3 or 4 leaves at apex. Leaves oblong or lanceolate-oblong,  $4-5 \times 0.6-1$  cm, apex acuminate; petiole 2-4 cm, articulate. Inflorescence arising from axil of apical leaf or a lower node, 5-6 mm, 2- or rarely 1flowered; floral bracts broadly elliptic, cuspidate-acuminate. Flowers small, 4-5 mm in diam., glabrous; pedicel and ovary ca. 3 mm, glabrous. Dorsal sepal oblong-ovate or suboblong, 3- $3.5 \times$  ca. 1.2 mm, acute; lateral sepals broadly triangular-ovate, oblique, ca.  $4 \times 2$  mm, subacute. Petals subovate, slightly shorter than dorsal sepal, acute; lip subovate in outline, ca. 3.5 mm, base subcuneate, 3-lobed; lateral lobes ca. 1.5 mm, ovate; mid-lobe subquadrate, ca.  $1 \times 1$  mm, crisped and apiculate, with a central suborbicular lamella ca. 0.5 mm high; disk with 2 suborbicular lamellae ca. 0.6 mm high. Column slightly arcuate, ca. 1.7 mm, apex slightly enlarged; foot ca. 1.5 mm. Fl. Apr.

• Epiphytic on tree trunks in evergreen forests; 1500–2200 m. SE Xizang.

**2.** Cylindrolobus cristatus (Rolfe) S. C. Chen & J. J. Wood, comb. nov.

#### 鸡冠柱兰 ji guan zhu lan

Basionym: *Eria cristata* Rolfe, Bull. Misc. Inform. Kew 1892: 139. 1892.

Pseudobulbs terete, sometimes clavate at apex, 9-11 cm, 3–6 mm in diam. Leaves 3 or 4, lanceolate,  $6-8.5 \times 1-1.4$  cm, acute. Inflorescences subterminal, 2-flowered; rachis white tomentose; floral bracts yellowish green, oblong-ovate, recurved,  $1.2-1.3 \times 0.8-0.9$  cm, obtuse. Flowers white; lip yellow, somewhat darker on disk and margins of lateral lobes; pedicel and ovary ca. 1.5 cm, white tomentose. Dorsal sepal ovate-lanceolate,  $13-14 \times 6-7$  mm, subacute; lateral sepals triangular-ovate, carinate, ca.  $15 \times 7-8$  mm, base oblique. Petals lanceolate,  $11-13 \times ca. 6$  mm, subobtuse; lip 3-lobed, 8–9 mm, apex recurved; lateral lobes erect, oblong; mid-lobe obovate, apex slightly denticulate; disk hairy, with 3 obscure keels, lateral keels terminating in 2 truncate fleshy crests, in front of which are 2 concavities partitioned by a median hairy keel, and elevated plates covered with yellow hairs forming 3 crests at apex. Column 5-6 mm.

Epiphytic on tree trunks; 1400–1500 m. S Yunnan (Pu'er) [Myanmar, Thailand].

**3.** Cylindrolobus marginatus (Rolfe) S. C. Chen & J. J. Wood, comb. nov.

#### 柱兰 zhu lan

Basionym: *Eria marginata* Rolfe, Gard. Chron., ser. 3, 5: 200. 1889; *Pinalia marginata* (Rolfe) Kuntze.

Plants 10–20 cm tall, without distinct rhizomes. Pseudobulbs tufted, clavate, 5–10 cm  $\times$  2–6 mm, above middle conspicuously dilated, apex 2- or 3(or 4)-leaved. Leaves sessile, oblong-lanceolate or ovate-lanceolate, 5–11  $\times$  1–2 cm, apex

acute. Inflorescences 1 or 2, subterminal, usually with 2 flowers on a short peduncle ca. 5 mm; floral bracts 2, opposite, oblong or ovate,  $10-12 \times 5-7$  mm, acute. Flowers fragrant, white; lip lateral lobes with purple edges, mid-lobe with lighter purple edges and patch; pedicel and ovary ca. 1.3 cm, with dense white cottony hairs. Sepals with white cottony hairs abaxially; dorsal sepal ovate-lanceolate, ca.  $15 \times 5$  mm, obtuse; lateral sepals falcate-lanceolate, nearly as long as dorsal sepal, ca. 6 mm wide, obtuse. Petals oblong-lanceolate, ca. 12 × 4 mm, obtuse, glabrous; lip obovate in outline, nearly 1 cm, 3-lobed; lateral lobes suberect, subovate, apex incurved and slightly covering mid-lobe; mid-lobe subrhombic-flabellate, ca. 5 × 5 mm, thickened and papillate except on margin, base with a suborbicular projection, apex emarginate; disk with a longitudinal thickened band running from base to mid-lobe and a central keel. Column ca. 3 mm; foot ca. 4 mm. Capsule obovoid-cylindric, ca. 3 cm × 5 mm. Fl. Feb–Mar, fr. May.

Epiphytic on tree trunks at forest margins; 1000–2000 m. S Yunnan [Myanmar, Thailand]. Flora of China 25: 349-350. 2009.