

24. CRYPTOSTYLIS R. Brown, Prodr. 317. 1810.

隐柱兰属 yin zhu lan shu

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Chlorosa Blume; *Zosterostylis* Blume.

Herbs, terrestrial. Rhizome horizontal or ascending, short, densely noded, producing aerial shoots from apical nodes; roots fasciculate, long, fleshy. Leaves basal, elliptic to ovate-lanceolate, base long attenuate into erect petiole-like stalks, with or without loosely sheathing cataphylls at base. Inflorescence erect or ascending, terminal, racemose, several flowered, with sheathing cataphylls at base and scattered sterile bracts along peduncle; floral bracts sheathing. Flowers not resupinate; pedicel and ovary erect, arcuate. Sepals and petals subsimilar, free, spreading, very narrow, margin often involute. Petals often slightly shorter and smaller than sepals; lip attached to base of column, entire, tapering toward apex, basally expanded and embracing column, spurless; disk usually with longitudinal ridges or elongate calli. Column short, with lateral wings; anther terminal, erect, 4-locular; pollinia 4, in 2 pairs, clavate, granular-farinaceous, attached to solitary viscidium; stigma entire, convex, fleshy; rostellum erect, broad and stout.

About 20 species: mainly in tropical Asia, from India and Sri Lanka to the Philippines, Australia, and the Pacific islands; two species in China.

- 1a. Leaves, petioles, inflorescence, and floral bracts uniformly green, lacking dark green or purplish brown blotches; lip ovate-lanceolate to ovate-oblong, lateral veins running closely parallel to midvein 1. *C. arachnites*
1b. Leaves, petioles, inflorescence, and floral bracts with dark green or purplish brown blotches; lip rhombic-ovate or obovate, outermost lateral veins widely spaced and running midway between midvein and lateral margins 2. *C. taiwaniana*

1. *Cryptostylis arachnites* (Blume) Blume, Coll. Orchid. 133. Formosa 23: 208. 1933. 1859.

隐柱兰 yin zhu lan

Zosterostylis arachnites Blume, Bijdr. 419. 1825; *Chlorosa latifolia* Blume; *Cryptostylis alismatifolia* F. Mueller; *C. erythroglossa* Hayata; *C. fulva* Schlechter; *C. fulva* var. *subregularis* Schlechter; *C. papuana* Schlechter; *C. stenochila* Schlechter; *C. vitiensis* Schlechter; *C. walkerae* (Wight) Blume; *C. zeylanica* (Lindley) Blume; *Zosterostylis walkerae* Wight; *Z. zeylanica* Lindley.

Plants 15–50 cm tall. Rhizome creeping; roots 4–6 cm, 5–7 mm in diam. Leaves 2 or 3, abaxially pale green, adaxially green, elliptic-ovate to elliptic, 8.5–11 × 4.5–5 cm, glabrous, base broadly cuneate or obtuse, apex acuminate; petiole-like base green, 6.5–11.5 cm. Inflorescence green, 15–47 cm, slender, glabrous, with several to many sterile bracts; rachis 8–10 cm, 10–20-flowered; floral bracts green, lanceolate, 10–15 × 2–3 mm, apex acuminate; ovary cylindrical, 8–14 mm including pedicel, glabrous. Sepals yellowish green, linear-lanceolate, 15–19 × 1.5–2 mm, 3-veined, margin involute, apex acuminate. Petals yellowish green, linear, 9–10 × ca. 1 mm, 1-veined, margin involute, apex acuminate; lip abaxially yellowish green, adaxially orange-red, tinged yellow near apex and with bright red spots, elliptic-lanceolate to ovate-oblong, 15–21 × 5–7 mm, 5-veined, lateral veins running closely parallel to midvein, base rounded and shallowly saccate, apex acuminate; disk with minute hairs. Column 2–2.5 mm; wings smooth; anther ellipsoid; pollinia 1.5–1.7 mm. Fl. May–Jun. $2n = 42$.

Broad-leaved evergreen forests, bamboo forests; 200–1500 m. S Guangdong, SW Guangxi, Taiwan [Cambodia, India, Indonesia, Laos, Malaysia, Myanmar, New Guinea, Philippines, Sri Lanka, Thailand, Vietnam].

2. *Cryptostylis taiwaniana* Masamune, Trans. Nat. Hist. Soc.

台湾隐柱兰 tai wan yin zhu lan

Cryptostylis arachnites (Blume) Blume var. *taiwaniana* (Masamune) S. S. Ying.

Plants 15–25 cm tall. Rhizome creeping or ascending. Leaves 1–3, pale green abaxially, green with dark green blotches adaxially, ovate to ovate-oblong, 5–15 × 3–6 cm, base obtuse or rounded, apex acute; petiole-like base with dark green or purplish brown spots, 7–12 cm. Inflorescence green with dark green or purplish brown spots, to 25 cm, glabrous, with 2–5 sterile bracts; rachis 5–15 cm, 5–15-flowered; floral bracts green with purplish brown spots, ovate-lanceolate, ca. 15 × 5 mm, 5-veined, apex acute or acuminate; ovary cylindrical, 8–10 mm including pedicel, glabrous. Sepals green, lanceolate, 8–15 × 2–3 mm, 3-veined, margin involute, apex acute. Petals similar to sepals, green, 7–12 × ca. 2 mm, 1-veined, margin involute, apex acute; lip adaxially orange-purple, with scattered dark crimson spots, rhombic-oblong to obovate, 15–20 × 8–12 mm, 5-veined, lateral veins widely spaced, outermost pair running midway between midvein and lateral margins, base rounded and shallowly saccate, lateral margins slightly revolute, apex acute; disk with minute hairs. Column 2.3–2.5 mm; wings rugose; anther ellipsoid; pollinia 1–1.5 mm. Fl. Apr–Aug.

Broad-leaved forests; 100–500 m. S Taiwan [Philippines].

Sufficient material of *Cryptostylis taiwaniana* on which to base a critical comparison with the widespread and variable *C. arachnites* is presently unavailable. In particular, the stability of the primary character used to distinguish the two—namely, the presence/absence of purple-green blotches on the vegetative parts—remains uncertain. As well, other character states are similar or overlap.

“*Cryptostylis philippinensis*” (Schlechter, Bot. Jahrb. Syst. 58: 54. 1922) is a nomen nudum and was therefore not validly published, and neither was the intended new combination “*Cryptostylis arachnites* var. *philippinensis*” (S. S. Ying, Coloured Ill. Indig. Orchids Taiwan 1(2): 118. 1977).

