

161. PELATANTHERIA Ridley, J. Linn. Soc., Bot. 32: 371. 1896.

钻柱兰属 zuan zhu lan shu

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Herbs, epiphytic or lithophytic, monopodial. Stems rather long climbing, rooting from nodes, usually slightly compressed trigonous, many noded, rigid, enclosed in persistent leaf sheaths, sometimes branched. Leaves many, usually densely distichous, flat, rarely subcylindric, leathery or slightly fleshy, base sheathing, jointed, apex bilobulate, rarely obtuse. Inflorescence racemose, axillary, usually very short, few flowered. Flowers small or medium-sized, fleshy. Sepals free, similar. Petals smaller; lip spurred at base, 3-lobed; lateral lobes erect, small; mid-lobe large, adaxially thickened and cushionlike centrally; spur narrowly conic, with a longitudinal septum or ridge on inner surface, and with a tough appendage on back wall. Column stout, apex with 2 long and incurved stelidia; rostellum small, short; pollinia 4 in 2 pairs, waxy, subglobose; stipe irregular, much broader than long; viscidium ± crescent-shaped.

About five species: tropical Himalayas south to Sumatra, north to Korea and Japan; four species in China.

Reviewer L. Averyanov notes that *Pelatantheria insectifera* (H. G. Reichenbach) Ridley (J. Linn. Soc., Bot. 32: 373. 1896; *Sarcanthus insectifer* H. G. Reichenbach, Bot. Zeitung (Berlin) 15: 159. 1857) should occur in S China. However, the present authors could not substantiate this assertion because they found no relevant specimens.

- 1a. Leaves 0.5–0.8 × ca. 0.15 cm, subcylindric, obtuse 1. *P. scolopendrifolia*
- 1b. Leaves much broader, flat, bilobed.
 - 2a. Mid-lobe of lip pink, apex obtuse 2. *P. rivesii*
 - 2b. Mid-lobe of lip waxy yellow, apex shortly cuspidate.
 - 3a. Apical tail of mid-lobe 2- or 3-lobed, margin not fimbriate 3. *P. bicuspidata*
 - 3b. Apical tail of mid-lobe entire, margin irregularly fimbriate 4. *P. ctenoglossa*

1. Pelatantheria scolopendrifolia (Makino) Averyanov, Bot. Zhurn. (Moscow & Leningrad) 73: 432. 1988.

蜈蚣兰 wu gong lan

Sarcanthus scolopendrifolius Makino, Ill. Fl. Japan 1(7): t. 40. 1891; *Cleisostoma scolopendrifolium* (Makino) Garay.

Plants creeping. Stems slender, ca. 1.5 mm in diam., many noded, branched. Leaves distichous, rather close; blade ± conduplicate, subcylindric, 5–8 × ca. 1.5 mm, leathery, apex obtuse; basal sheaths ca. 5 mm. Inflorescence a raceme, lateral, often shorter than leaves; raceme 1- or 2-flowered; peduncle 2–4 mm, slender; floral bracts ovate, ca. 0.5 mm. Flowers opening widely, thinly textured; sepals and petals pale flesh-colored; lip white spotted with yellow; pedicel and ovary ca. 3 mm. Dorsal sepal ovate-oblong, ca. 3 × 1.5 mm, apex obtuse; lateral sepals obliquely ovate-oblong, ca. 3 × 2 mm. Petals suboblong, smaller than dorsal sepal; lip spurred at base, 3-lobed; lateral lobes erect, subtriangular, obtuse; mid-lobe ligulate-triangular or sagittate-triangular, ca. 3 mm, ± fleshy, apex long acute, base with 1 ridge running into spur; spur subglobose, ca. 0.8 mm in diam., apex emarginate; callus on its back wall 3-lobed; lateral lobules horn-shaped; mid-lobe U-shaped, basal half densely minutely papillate-hairy; septum inside spur inconspicuous. Column ca. 1.5 mm, base with a short foot; anther cap truncate and emarginate at apex; stipe broadly ovate, base folded; viscidium saddle-shaped. Fl. Apr.

On rocks or tree trunks in forests or shaded places; 100–1000 m. Anhui, W Fujian, Jiangsu, Shandong, NE Sichuan, E Zhejiang [Japan, Korea].

2. Pelatantheria rivesii (Guillaumin) Tang & F. T. Wang, Acta Phytotax. Sin. 1: 101. 1951.

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Sarcanthus rivesii Guillaumin, Bull. Soc. Bot. France 77: 330. 1930.

Stems to 1 m, ca. 7 mm in diam., often branched. Leaves elliptic, 3–4 × 1–1.5 cm, obtuse and unequally bilobed. Inflorescence 5–10 mm, 2–7-flowered; peduncle very short, with 2 or 3 papery short sheaths; floral bracts ovate-triangular, ca. 1.5 mm, obtuse. Flowers thickly textured, sepals and petals pale yellow with 2 or 3 brown stripes, lip pink; pedicel and ovary ca. 8 mm. Dorsal sepal subelliptic, ca. 4 × 2.2 mm, obtuse; lateral sepals ovate-oblong, broader, obtuse. Petals oblong, ca. 4 × 1.5 mm, obtuse; lip larger than sepals and petals, 3-lobed; lateral lobes erect, ovate-triangular, small, obtuse; mid-lobe broadly ovate-triangular, ca. 6 × 6 mm, base with a papillate callus on either side, apex slightly narrowed and obtuse; spur ca. 3 × 2.5 mm, interior with a longitudinal ridge on front wall gradually broader from entrance down to end, and with an elliptic appendage on back wall. Column ca. 2 mm, with dense white glandular long hairs on front sides. Fl. Oct.

Epiphytic on tree trunks or lithophytic on rocks in broad-leaved evergreen forests; 700–1100 m. W Guangxi, S and SW Yunnan [Laos, Vietnam].

3. Pelatantheria bicuspidata Tang & F. T. Wang, Acta Phytotax. Sin. 1: 101. 1951.

尾丝钻柱兰 wei si zuan zhu lan

*Sarcanthus bicuspis*datus Rolfe ex Downie, Bull. Misc. Inform. Kew 1925: 391. 1925, not (J. D. Hooker) J. J. Smith (1912).

Stems elongate, branched. Leaves elliptic-oblong, often V-shaped-conduplicate, falcate in side view, 3–4 × ca. 1.4 cm, obtuse and unequally bilobed. Inflorescence ca. 5 mm, usually 2- or 3-flowered; peduncle ca. 5 mm, with 2 or 3 short sheaths; floral bracts ovate-triangular, 3–4 mm, acute. Flowers opening widely, whitish, with purplish red veins on sepals and petals, lip waxy yellow on disk, spur yellowish green, column white; pedicel and ovary yellowish green, 8–12 mm. Sepals similar, broadly elliptic, slightly concave, ca. 5 × 3 mm, acute. Petals oblong, ca. 4 × 2 mm, acute; lip spurred at base, 3-lobed; lateral lobes erect, ovate-triangular, small; mid-lobe subcordate, large, ca. 5 × 4 mm, shortly caudate and shallowly 2- or 3-lobed; spur ca. 5 × 3.5 mm, stout, with a longitudinal groove on front surface, interior with a longitudinal broad ridge almost dividing spur into 2 halves, and with an appendage on back wall. Column ca. 2 mm, with a cluster of short white glandular hairs on either side below middle. Fl. Jun–Oct.

Epiphytic on tree trunks or lithophytic on rocks in open forests; 800–1400 m. SW Guizhou, S and SE Yunnan [Thailand].

4. Pelatantheria ctenoglossa Ridley, J. Linn. Soc., Bot. 32: 372. 1896.

锯尾钻柱兰 ju wei zuan zhu lan

Stems elongate, 6–7 mm in diam. Leaves elliptic-oblong, 3–4 × 1–1.5 cm, obtuse, unequally bilobed. Inflorescence short, 2–6-flowered; floral bracts ovate-triangular, ca. 1.5 mm. Flowers pale yellow, sepals with purplish red veins, disk yellow and spotted purplish red, spur white, apex tinged pale yellow; pedicel and ovary 7–8 mm. Dorsal sepal broadly elliptic, concave, ca. 6.5 × 4.5 mm, with 5 purplish red veins, obtuse; lateral sepals similar to dorsal sepal, 7-veined. Petals oblong, ca. 5 × 3 mm, apical margin ± irregularly denticulate; lip fleshy, 3-lobed; lateral lobes erect, subovate-triangular, obtuse; mid-lobe subcordate, ca. 4 × 5 mm, margin white ciliate, apex shortly cuspidate; disk thickened and cushionlike centrally, waxy; spur ca. 4 × 2 mm, interior with a longitudinal broad ridge almost dividing spur into 2 halves, and with an elliptic appendage on back wall. Column ca. 2 mm, with tufted white hairs on both sides at base. Fl. Aug. 2n = 38.

Lithophytic on rocks and epiphytic on tree trunks in broad-leaved evergreen forests; ca. 700 m. S Yunnan [Cambodia, Laos, Thailand, Vietnam].

