## 165. ESMERALDA H. G. Reichenbach, Xenia Orchid. 2: 38. 1862.

花蜘蛛兰属 hua zhi zhu lan shu

## Chen Xinqi (陈心启 Chen Sing-chi); Jeffrey J. Wood

Herbs, epiphytic, monopodial, erect or pendulous, large. Roots aerial, piercing through leaf sheaths along stem. Stem scandent, terete, stout, with many nodes. Leaves distichous, flat, usually oblong, twisted (to lie in one plane), thickly leathery, base sheathing, jointed, apex unequally bilobed. Inflorescence lateral, erect, racemose, few flowered; floral bracts persistent, scarious, sheathing. Flowers large, showy, thickly textured. Sepals and petals free, similar, spreading, overlapping, ovate to oblong. Petals slightly smaller; lip free, pendulous, movable, 3-lobed; lateral lobes small; mid-lobe reniform, clawed, margin crenate; disk 2-callose. Column short, stout, both sides winged, foot absent; anther cap terminal; pollinia 4, in 2 pairs, waxy, dorsally compressed, subglobose, unequal in size, attached by a triangular stipe to a large, saddle-shaped viscidium.

Three species: China, Himalayas, Myanmar, Thailand; two species in China.

1. Esmeralda clarkei H. G. Reichenbach, Gard. Chron., n.s., 26: 552. 1886.

## 花蜘蛛兰 hua zhi zhu lan

*Arachnanthe clarkei* (H. G. Reichenbach) Rolfe; *Arachnis clarkei* (H. G. Reichenbach) J. J. Smith; *Vanda clarkei* (H. G. Reichenbach) N. E. Brown.

Stems rigid, to 1 m tall, stout, 7-10 mm in diam., internodes 2-3 cm, branched, covered by leaf sheaths. Leaves distichous; leaf blade narrowly oblong,  $13-25 \times 1.7-3$  cm, leathery, obtuse and slightly unequally bilobed. Inflorescence to 32 cm, unbranched, 3- or 4-flowered; peduncle 3-5 cm, stout, with 2 or 3 sheaths; rachis 12-15 cm, weakly zigzag; floral bracts broadly ovate, 1-1.7 cm. Flowers slightly fragrant, opening widely, pale yellow with reddish brown transverse stripes, 5.5-7.5 cm in diam., thickly textured; pedicel and ovary ca. 3 cm. Dorsal sepal oblanceolate-elliptic, ca.  $3.5 \times 1-1.2$  cm, obtuse; lateral sepals obovate-elliptic, falcate,  $3-3.2 \times 0.9-1.2$ cm. Petals subspatulate, falcate,  $2.8-3.1 \times 0.9-1.1$  cm, obtuse; lip pendulous, ca. 1.7 cm, 3-lobed; claw ca. 2 mm; hypochile  $6-8 \times 5-6$  mm, with 2 auriculate lateral lobes; mesochile  $4-5 \times$ 1–1.5 mm, narrow; epichile reniform,  $8-9 \times 5-6$  mm, margin crenulate; disk with 7-9 radiating keels and 2 raised calli in center of lip. Column clavate, 1.2-1.4 cm, stout; stipe horseshoe-shaped, ca.  $4 \times 2$  mm. Capsule ellipsoid-cylindric, 3.5–5.5  $\times$  1.5–2 cm. Fl. Oct. fr. Nov–Dec.

Lithophytic on rocks along valleys, epiphytic on tree trunks in open forests; 500–2100 m. Hainan, SW Yunnan [Bhutan, NE India, Myanmar, Nepal, Thailand, NW Vietnam].

**2. Esmeralda bella** H. G. Reichenbach, Gard. Chron., ser. 3, 3: 136. 1888.

## 口盖花蜘蛛兰 kou gai hua zhi zhu lan

Arachnis bella (H. G. Reichenbach) J. J. Smith.

Stems usually 20-30 cm, ca. 1 cm in diam., stout, rigid, with many nodes. Leaves many, sparsely distichous; leaf blade

narrowly oblong,  $13-16 \times 2.5-3$  cm, leathery, obtuse and unequally bilobed. Inflorescences often 2 or 3, ascending, racemose, 12-18 cm, sparsely 2- or 3-flowered; peduncle 5-12 cm, with 3-6 tubular sheaths; floral bracts broadly ovate, 1-1.7 cm. Flowers large, opening widely, yellow, densely marked with reddish brown transverse stripes; pedicel and ovary ca. 3 cm. Dorsal sepal  $\pm$  obovate-oblong, ca. 3  $\times$  1 cm, obtuse; lateral sepals obovate-oblong, ca.  $2.7 \times 0.8$  cm, obtuse. Petals narrowly oblong, ca.  $2.7 \times 0.7$  cm, obtuse; lip somewhat pandurate, ca. 14 mm, 3-lobed; claw ca. 2 mm; lateral lobes erect, subsquare, ca. 4 × 4 mm, obliquely truncate; mid-lobe nearly obovate-cuneate, ca.  $8 \times 9$  mm, base contracted, apex emarginate, with a recurved, calluslike appendage in sinus, margin irregularly denticulate, with a thickened keel from base to apex; disk with a bilobed callus and a movable lidlike appendage covering it; sac small, ca. 3 × 2 mm. Column ca. 8 mm, stout. Fl. Nov.

Epiphytic on tree trunks in open forests; 1700–1800 m. SE Xizang, S and SW Yunnan [India, Myanmar, Nepal, Thailand]. Flora of China 25: 464-465. 2009.