

155. RENANTHERA Loureiro, Fl. Cochinch. 2: 516, 521. 1790.

火焰兰属 *huo yan lan shu*

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Herbs, epiphytic or lithophytic (rarely terrestrial), robust, monopodial. Stem long, often up to several meters, climbing, sometimes branched, with many nodes and long internodes. Leaves many, distichous, often oblong, flat, thickly leathery, unequally bilobed, with a sheathing base, and blade jointed to sheath. Inflorescence lateral, relatively long, paniculate, occasionally racemose, laxly many flowered. Flowers resupinate, opening widely, predominantly red or orange, sometimes yellow, flat, medium-sized or large. Sepals and petals free; dorsal sepal and petals similar, spreading; lateral sepals usually broader than dorsal sepal and petals, margins subparallel, undulate. Lip attached to column base, immovable, much smaller than petals and sepals, saccate or spurred, 3-lobed; lateral lobes erect, adaxially with 1 callus at base; mid-lobe often ligulate and recurved, small, with lamellate basal calli; spur conic. Column short and stout, without a foot; rostellar projection short; pollinia 4, in 2 pairs, waxy, reniform, slightly unequal in size, each pair with an elastic thread at base, attached by a common linear stipe to a transversely elliptic viscidium.

About 19 species: E India through China to the Philippines and south to Malaysia, Indonesia, New Guinea, and the Solomon Islands; three species in China.

Reviewer L. Averyanov notes that *Renanthera vietnamensis* Averyanov & R. Rice (Oasis 2(3): 3. 2002), described from N Vietnam, also occurs in S China. However, the present authors could not substantiate this record because they found no relevant specimens.

- 1a. Inflorescences borne opposite leaves; flowers deep red or scarlet; lateral lobes of lip subquadrate to orbicular; mid-lobe without basal calli 1. *R. coccinea*
- 1b. Inflorescences axillary; flowers reddish or yellowish; lateral lobes of lip ovate-lanceolate; mid-lobe with basal calli.
 - 2a. Leaves 13–25 mm wide; pedicel and ovary reddish; lateral sepals ca. 10 mm wide, reddish; mid-lobe of lip not saccate 2. *R. imschootiana*
 - 2b. Leaves 9–11 mm wide; pedicel and ovary yellowish; lateral sepals 4.5–5.5 mm wide, yellowish, sparsely spotted with purple-red; mid-lobe of lip subglobose to saccate in apical half 3. *R. citrina*

1. *Renanthera coccinea* Loureiro, Fl. Cochinch. 2: 521. 1790.

火焰兰 *huo yan lan*

Stems climbing, terete, more than 1 m, stout, ca. 1.5 cm in diam., usually unbranched, internodes 3–4 cm. Leaf blade ligulate or oblong, 7–8 × 1.5–3.3 cm, somewhat unequally obtusely bilobed. Inflorescences opposite to leaves, often 3 or 4, to 1 m, stout and rigid, often with several branches, laxly many flowered; floral bracts broadly ovate-triangular, ca. 3 mm. Flowers flame-red, sepals and petals with orange spots adaxially especially at margins; pedicel and ovary 2.5–3 cm. Dorsal sepal narrowly spatulate, 20–30 × 4.5–6 mm, margin slightly undulate, apex obtuse; lateral sepals oblong, 25–35 × 8–12 mm, base contracted into a claw, margin conspicuously undulate, apex obtuse. Petals similar to dorsal sepal but smaller, rounded; lip 3-lobed; lateral lobes erect, nearly suborbicular or square, ca. 3 × 4 mm, base with a pair of fleshy, suborbicular calli, apex rounded; mid-lobe ovate, ca. 5 × 2.5 mm, recurved from middle, acute; spur conic, ca. 4 mm. Column ca. 5 mm; stipe ca. 2 mm, ± geniculate-curved at middle. Fl. Apr–Jun. *2n* = 38, 114.

Epiphytic on tree trunks or lithophytic on rocks in open forests or at forest margins along valleys; 200–1400 m. SW Guangxi, Hainan, SE Yunnan [Laos, Myanmar, Thailand, Vietnam].

2. *Renanthera imschootiana* Rolfe, Bull. Misc. Inform. Kew 1891: 200. 1891.

云南火焰兰 *yun nan huo yan lan*

Stems to 1 m, with many rather contiguous and distichous leaves. Leaf blade oblong, 6–8 × 1.3–2.5 cm, leathery, somewhat obliquely rounded-bilobed. Inflorescence axillary, to 1 m,

usually branched, many flowered; peduncle and rachis slender; floral bracts broadly ovate, ca. 2 mm, apex obtuse. Flowers: sepals and petals dull yellow, spotted with red on apical half of petals and tinged with red on lateral sepals, lip red with whitish markings, spur yellow with red tip, column deep red; pedicel and ovary reddish, 2–2.3 cm. Dorsal sepal subspatulate-oblan-ceolate, ca. 24 × 5 mm, ± acute; lateral sepals obliquely elliptic-ovate, ca. 30 × 10 mm, base contracted into a claw ca. 6 mm, margin undulate, apex obtuse. Petals narrowly spatulate, ca. 20 × 4 mm, obtuse and thickened; lip 3-lobed; lateral lobes erect, deltoid, ca. 3 mm, exceeding column, base with 2 membranous lamellae, apex acute; mid-lobe ovate, ca. 4.5 × 3 mm, acute, strongly recurved, base with 3 fleshy calli; spur ca. 2 mm, obtuse. Column cylindric, ca. 4 mm. Fl. May. *2n* = 38.

Epiphytic on tree trunks in forests along valleys; below 500 m. S Yunnan [NE India (Manipur), ?Myanmar, Vietnam].

3. *Renanthera citrina* Averyanov, Orchids 66: 1287. 1997.

中华火焰兰 *zhong hua huo yan lan*

Renanthera citrina var. *sinica* (Z. J. Liu & S. C. Chen) R. Rice; *R. sinica* Z. J. Liu & S. C. Chen.

Stems suberect or ± scrambling, 20–40(–80) cm, distichously many leaved. Leaf blade narrowly oblong, 7–10 × 0.9–1.1 cm, thickly leathery, unequally obtusely bilobed. Inflorescence solitary, axillary, from upper part of stem, racemose, 12–26 cm, 5–10-flowered; floral bracts ca. 1 mm, membranous. Flowers yellowish, sparsely spotted with purple-red; pedicel and ovary 1.6–2.7 cm. Dorsal sepal narrowly oblong-spatulate, 18–22 × 3–4 mm, obtuse-acute; lateral sepals similar to dorsal

sepal, usually somewhat twisted, $26\text{--}31 \times 4.5\text{--}5.5$ mm, base with a claw $5\text{--}6$ mm, margin strongly undulate, recurved. Petals linear, $13\text{--}17 \times 1.5\text{--}2.5$ mm, obtuse; lip much smaller, 3-lobed; lateral lobes erect, ovate-lanceolate, $1.5\text{--}2$ mm; mid-lobe suborbicular, subglobose-saccate in apical half, ca. 2 mm, with 3 ridges near base, with a shortly conic basal sac ca. 2×2 mm

and a pair of subquadrate lamellate calli between its base and distal edges of lateral lobes, extending downward into sac. Column $3.5\text{--}4$ mm. Fl. Apr–May.

Epiphytic on tree trunks or lithophytic on rocks along valleys; $500\text{--}800$ m. SE Yunnan [Vietnam].

