

## 52. CYRTOSIA Blume, Bijdr. 396. 1825.

肉果兰属 rou guo lan shu

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Herbs, mycotrophic. Rhizome stout, with fleshy or sometimes tuberlike roots. Stems erect, often several arising from 1 rhizome, simple or branched, yellowish brown to reddish brown, fleshy, with scales at nodes. Raceme or panicle terminal or lateral, several or many flowered; rachis shortly hairy or mealy-hairy; floral bracts persistent. Flowers not fully opening, medium-sized. Sepals and petals connivent; sepals often ± hairy abaxially. Petals glabrous; lip erect, unlobed, spurless, base connate to column, ± embracing column. Column slightly curved, stout, upper part enlarged, without a foot; anther terminal, incumbent, 2-locular; pollinia 2, granular-farinaceous, without caudicle or viscidium. Fruit fleshy, indehiscent. Seeds with stout testa, wingless or with a narrow surrounding wing.

Five species: tropical Asia to E Asia; three species in China.

- 1a. Plants rather large, 30–170 cm tall; lateral racemes 3–7(–10) cm; tuberlike roots absent ..... 3. *C. septentrionalis*
- 1b. Plants relatively small, 8–22 cm tall; lateral racemes very short or absent; tuberlike roots conspicuous, 5–12 mm in diam.
  - 2a. Inflorescence terminal; lip glabrous ..... 1. *C. javanica*
  - 2b. Inflorescence terminal and lateral, latter at least represented by a short raceme; lip with white hairs near adaxial apex ..... 2. *C. nana*

### 1. *Cyrtosia javanica* Blume, Bijdr. 396. 1825.

肉果兰 rou guo lan

*Galeola javanica* (Blume) Bentham & J. D. Hooker.

Plants small, ca. 10 cm tall. Tuberlike roots tufted, cylindrical or clavate, 5–8 cm, stout, 8–12 mm in diam., thick, fleshy. Stems 1–3 arising from 1 rhizome, erect, 6–8 cm tall, with imbricate scales at nodes; scales alternate, yellowish brown, turning dark brown with age, elliptic-ovate, cymbiform or with subspherical base, glabrous. Inflorescence racemose, 5–8-flowered; floral bracts subtriangular, small; pedicel and ovary 1–1.5 cm, mealy-pubescent. Flowers not fully opening, yellowish brown, fleshy. Sepals mealy-pubescent abaxially; dorsal sepal oblong, ca. 16 × 8 mm, slightly concave; lateral sepals broadly ovate, ca. 16 × 9 mm. Petals oblong, ca. 15 × 7 mm, thinly textured; lip adnate to base of column, yellowish at base, whitish near apex, suborbicular, with thickened disk and spongy limb. Column clavate, ca. 8 mm, winged at apex; wing erose-dentate at apex. Fruit sausage-shaped, ca. 5 cm, indehiscent. Fl. May–Jun.

Bamboo forests. C Taiwan [India, Indonesia, Malaysia, Philippines, Sri Lanka, Thailand, Vietnam].

### 2. *Cyrtosia nana* (Rolfe ex Downie) Garay, Bot. Mus. Leaflet 30: 233. 1986.

矮小肉果兰 ai xiao rou guo lan

*Galeola nana* Rolfe ex Downie, Bull. Misc. Inform. Kew 1925: 409. 1925.

Plants small, ± fleshy. Rhizome short, stout. Tuberlike roots pale yellowish white, cylindrical, 2.5–9 cm, 5–8 mm in diam., fleshy. Stem erect, yellowish white, slightly tinged with red, 10–22 cm tall, glabrous or apical half with sparse rust-colored, mealy, short hairs, nodes with lanceolate scales; internodes usually 1–3 cm. Inflorescence terminal and lateral, sometimes lateral inflorescence very short or inconspicuous; terminal raceme 6–11-flowered; rachis rusty mealy-puberulent; floral

bracts ovate-lanceolate, 2–4 mm, abaxially rusty puberulent; pedicel and ovary 8–10 mm, also with rust-colored hairs. Flowers pale yellow, lip with orange-red longitudinal stripes. Sepals elliptic, 1–1.2 × ca. 0.6 cm, abaxially rusty mealy-puberulent, apex acute. Petals similar to sepals, slightly narrower, glabrous; lip ± embracing column, broadly ovate, ca. 1 × 1.2 cm, margin somewhat undulate, disk with a thick longitudinal ridge centrally, adaxially white pilose near apex. Column ca. 6 mm, apex slightly dilated, without conspicuous wing. Fl. Apr–Jun.  $2n = 28$ .

Forests or shaded places along valleys; 500–1400 m. S Guangxi, SW Guizhou [Thailand, N Vietnam].

### 3. *Cyrtosia septentrionalis* (H. G. Reichenbach) Garay, Bot. Mus. Leaflet 30: 223. 1986.

血红肉果兰 xue hong rou guo lan

*Galeola septentrionalis* H. G. Reichenbach, Xenia Orchid. 2: 78. 1865.

Plants rather large. Rhizome nearly creeping, stout, 1–2 cm in diam., with sparse ovate scales. Stem erect, red-brown, 30–170 cm, apical half shortly rusty tomentose. Inflorescence terminal and lateral; lateral raceme 3–7(–10) cm, 4–9-flowered, base with a few ovate-lanceolate sterile bracts 1.5–2.5 cm; floral bracts ovate, 2–3 mm, abaxially with rusty hairs; pedicel and ovary 1.5–2 cm, shortly rusty tomentose. Flowers yellow, ± tinged with red-brown. Sepals elliptic-ovate, ca. 2 cm, abaxially shortly rusty tomentose. Petals similar to sepals, slightly narrower, glabrous; lip nearly broadly ovate, shorter than sepals, adaxially hairy-papillose or occasionally crested-lamellate along main veins, margin irregularly dentate or erose. Column ca. 7 mm. Fruit blood-red, suboblong, 7–13 × 1.5–2.5 cm, fleshy. Seeds with surrounding wing; wing less than 1 mm wide. Fl. May–Jul, fr. Sep.  $2n = 28$ .

Forests; 1000–1300 m. SW Anhui, W Henan, Hunan, Zhejiang [Japan (Ryukyu Islands)].

