# **133. CRYPTOCHILUS** Wallich, Tent. Fl. Napal. 36. 1824.

宿苞兰属 su bao lan shu

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

Xiphosium Griffith.

Herbs, epiphytic or lithophytic. Rhizome creeping. Pseudobulbs tufted, ovoid or dilated, enclosed within several acute, imbricate, brown sheaths below, 1-leaved at apex or with 2 or 3 leaves toward apex, covered when young by acute sheaths. Leaves suberect to erect, conduplicate, leathery, articulate to apex of sheath. Inflorescence terminal, synanthous, racemose, secund; floral bracts prominent, lanceolate, almost as long as flowers. Flowers resupinate, campanulate or opening widely, spreading or subnutant, white, pink, red, or yellow, small, glabrous. Sepals fused into a cylindric tube except for their apical 1/4, or dorsal sepal free, lateral sepals oblique at base, attached to column foot to form a conic mentum. Petals free, enclosed in tube, oblanceolate, smaller than sepals; lip entire and ecallose, or 3-lobed and callose, recurved in apical half, lacking a spur, firmly attached to column foot to form an obscure mentum. Column with a foot ca. as long as or longer than column; anther 8-locular; pollinia 8, clavate, attached to a prominent, elongate, narrowly elliptic viscidium, bifid at apex; rostellum prominently bilobed; ovary markedly keeled, triangular in cross section.

About ten species: Bhutan, S China, N India, Laos, Myanmar, Nepal, Thailand, Vietnam; three species (one endemic) in China.

- 1a. Pseudobulbs 1-leaved; floral bracts 2–5 cm; sepals dorsally carinate; inflorescence laxly 2–5-flowered; flowers white or pink 3. C. roseus
- 1b. Pseudobulbs 2-leaved; floral bracts 6-21 mm; sepals not dorsally carinate; inflorescence subdensely 7- to many flowered; flowers yellow or scarlet.

### 1. Cryptochilus luteus Lindley, J. Proc. Linn. Soc., Bot. 3: 21. 1858 ["lutea"].

#### 宿苞兰 su bao lan

Cryptochilus farreri Schlechter.

Pseudobulbs clustered on a short rhizome, cylindric, 1.5-3.5 cm × 5-10 mm, 2-leaved. Leaf blade narrowly oblong or suboblanceolate-oblong, 5–16.5 × 1–2.5 cm, papery, acuminate; petiole 1-3 cm. Inflorescence subdensely 20-40-flowered; peduncle 7-14 cm, slender, glabrous; rachis 3.5-8 cm; floral bracts alternate, narrowly lanceolate, 6-14 mm, grooved, long acuminate. Flowers yellowish green or yellow; pedicel and ovary 3-4 mm, densely pubescent. Sepals connate into an urceolate tube, 3-5 mm, outer surface glabrous; free apical lobes ovate-triangular, ca. 1 mm; lateral sepals convex on one side; mentum saccate, short. Petals hidden in mentum, obovate-lanceolate,  $3.5-4 \times ca.~0.8$  mm; lip subrhombic-cuneate,  $3.5-4 \times ca.~0.8$ ca. 0.8 mm, base slightly curved, apex obtuse. Column short, thick, apex dilated, with a short foot. Capsule suboblong,  $6-7 \times$ 3-3.5 mm. Fl. Jun-Jul, fr. Sep-Oct.

Epiphytic on trees or lithophytic on rocks in dense forests or at forest margins; 1000-2300 m. W to SE Yunnan [Bhutan, NE India, N

### 2. Cryptochilus sanguineus Wallich, Tent. Fl. Napal. 36. 1824 ["sanguinea"].

## 红花宿苞兰 hong hua su bao lan

Rhizome short. Pseudobulbs ovoid to ellipsoid-cylindric, 1.5-3 cm  $\times$  5-8(-10) mm, sheathed at base, 2-leaved. Leaf blade narrowly oblong or oblanceolate-oblong,  $6-15 \times 1.5-3$ cm, papery, shortly acuminate; petiole 7-15 cm. Inflorescence subdensely 10-30-flowered; peduncle 9.5-19 cm, glabrous; rachis 4-9 cm, glabrous; floral bracts distichous, subulate-lanceolate, 5-21 mm, grooved, pubescent externally, long acuminate. Flowers 6–11 mm, sepaline tube scarlet with purple apices; petals, lip, and column yellow; pedicel and ovary 4-10 mm, densely white pubescent. Sepals connate into a tube 6–9 mm, outer surface densely white villous; free apical lobes ovate-triangular, 3–4 mm,  $\pm$  glabrous; lateral sepals conspicuously convex on one side at base forming a saccate mentum. Petals hidden in mentum, oblanceolate, 5–6 × ca. 1 mm; lip completely hidden in sepaline tube, suboblong, ca. 7 × 2 mm. Column short, thick, with a short foot. Fl. Jun–Aug. 2n = 38.

Epiphytic on trees in forests; 1800–2100 m. SE Xizang, NW Yunnan [Bhutan, NE India, Myanmar, Nepal].

# **3.** Cryptochilus roseus (Lindley) S. C. Chen & J. J. Wood, comb. nov.

#### 玫瑰宿苞兰 mei gui su bao lan

Basionym: *Eria rosea* Lindley, Bot. Reg. 12: ad t. 978. 1826; *Octomeria rosea* (Lindley) Sprengel; *Pinalia rosea* (Lindley) Kuntze; *Xiphosium roseum* (Lindley) Griffith.

Rhizome stout, ca. 1 cm in diam. Pseudobulbs contiguous, or 1–2 cm apart from each other, ovoid,  $2-5 \times 1-2$  cm, enclosed in sheaths when young, apex 1-leaved. Leaf blade lanceolate or oblong-lanceolate, 16-40 × 2-5 cm, thickly leathery, obtuse or acute; petiole 3-6 cm. Inflorescence nearly as long as leaf, laxly 2-5-flowered; floral bracts deciduous when fruiting, linear, 2-5 cm. Flowers white or pink; pedicel and ovary 1-3 cm. Dorsal sepal ovate-oblong, ca. 12 × 5 mm, dorsally carinate; lateral sepals triangular-lanceolate, ca. 14 × 8–9 mm, dorsally carinate, obtuse; mentum ca. 4 mm. Petals subrhombic, ca. 11 × 6 mm, base cuneate, apex obtuse; lip obovate-elliptic or subovate in outline,  $13-14 \times 8-10$  mm, base narrowed or subtruncate, 3lobed; lateral lobes incurved, subovate; mid-lobe subspatulate or subquadrate,  $4-6 \times 4-5$  mm, apex rounded and emarginate; disk with 2 or 3 thickened lamellae running from base to base of mid-lobe, further divided into 7 thinner lamellae. Column ca. 6 mm, apex slightly dilated; foot 4-6 mm. Capsule cylindric, 3-4 cm. Fl. Jan-Feb, fr. Mar-Apr.

• Epiphytic on trees or lithophytic on rocks in dense forests; ca. 1300 m. Hainan, Hong Kong.

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