## 99. CEPHALANTHEROPSIS Guillaumin, Bull. Mus. Natl. Hist. Nat., sér. 2, 32: 188. 1960.

黄兰属 huang lan shu

Chen Xinqi (陈心启 Chen Sing-chi); Stephan W. Gale, Phillip J. Cribb

Herbs, terrestrial or rarely epiphytic. Rhizome creeping. Stem erect, cylindric, reedlike, many noded, enclosed in tubular sheaths toward base, leafy above. Leaves many, plicate, base decurrent into an amplexicaul sheath, articulate. Inflorescences usually 1–3, arising laterally from nodes in lower half of stem, erect or ascending, racemose; peduncle with several amplexicaul sterile bracts at base; rachis many flowered; floral bracts caducous, lanceolate. Flowers spreading horizontally or nodding, small to medium-sized, opening widely or not. Sepals and petals similar, free, spreading to reflexed; petals sometimes broader than sepals; lip adnate to base of column, 3-lobed above middle, spurless but base shallowly saccate or concave; lateral lobes erect, loosely embracing column; mid-lobe expanding from a short claw, usually 2-lobulate, apical margin usually strongly crisped; disk sometimes with a callus composed of 2 ridges. Column stout, winged, slightly dilated at base but without a column foot; anther terminal, incumbent; rostellum ovate, small; stigma subterminal, suborbicular; pollinia 8, in 2 groups of 4, equal in size, narrowly obovoid, waxy, borne on a globose viscidium.

About five species: from NE India through S China to S Japan (Ryukyu Islands), mainland SE Asia, the Philippines, and Sumatra; three species in China.

- 1b. Plants 30–50 cm tall; flowers white or pale yellow, not opening widely; lateral lobes of lip without terminal auricles, apices subtruncate and irregularly incised.

**1. Cephalantheropsis obcordata** (Lindley) Ormerod, Orchid Digest 62: 157. 1998.

## 黄兰 huang lan

Bletia obcordata Lindley, Gen. Sp. Orchid. Pl. 123. 1831; Calanthe bursicola Gagnepain; C. gracilis Lindley; C. gracilis var. venusta (Schlechter) F. Maekawa; C. ramosii Ames; C. tubifera J. D. Hooker; C. venusta Schlechter; Cephalantheropsis gracilis (Lindley) S. Y. Hu; C. venusta (Schlechter) S. Y. Hu; Gastrorchis gracilis (Lindley) Averyanov; Limatodis gracilis (Lindley) Lindley; Paracalanthe gracilis (Lindley) Kudô; P. venusta (Schlechter) Kudô; Phaius gracilis (Lindley) S. S. Ying (1977), not Hayata (1911); P. ramosii (Ames) Ames.

Plants 35-100 cm tall. Stem erect, cylindric, to 60 cm, many noded (internodes 5-10 cm), with tubular membranous sheaths toward base, 5-9-leaved above. Leaves oblong or oblong-lanceolate,  $15-35 \times 3-8$  cm, papery, base contracted into a short petiole-like stalk, apex acute or acuminate. Inflorescences 1-3, erect, 35-60 cm, unbranched or rarely 1- or 2branched near base; peduncle densely puberulent, with a few scattered sheaths; rachis 5-20 cm, laxly 6- to many flowered; floral bracts narrowly lanceolate, 20-40 cm, membranous, apex acuminate. Flowers slightly fragrant, spreading horizontally, opening widely; sepals and petals green to vellowish green, lip white with a central orange-yellow patch, all parts turning orange-brown with age; pedicel and ovary 10-20 mm, densely puberulent. Sepals and petals strongly reflexed; sepals similar, elliptic-lanceolate or ovate-lanceolate,  $9-11 \times 3.5-4$  mm, outer surfaces densely puberulent, inner surfaces glabrous or sparsely puberulent, 3-5-veined, apex aristate. Petals ovate-elliptic, 8-10  $\times$  3.5–4 mm, outer surfaces puberulent, 3-veined, apex subobtuse and mucronate; lip spreading, suboblong,  $9-12 \times 5-7$  mm, slightly concave at base, 3-lobed above middle; lateral lobes suberect and embracing column, with distinct subtriangular-falcate auricles projecting forward, apices acute to subacuminate; mid-lobe subreniform,  $2-3 \times 5-7$  mm (excluding claw), shortly clawed at base, margin strongly crisped, apex emarginate; claw at base of mid-lobe ca. 1.5 mm; disk with a pair of yellow lamellae extending from near base of lip onto claw of mid-lobe and with many orange-red papillae between lamellae. Column 3-5 mm, base often dilated, winged below middle, hairy; rostelum ovate-triangular, small, ca. 0.8 mm; pollinia ca. 0.8 mm. Capsule cylindric,  $15-20 \times 8-10$  mm, ridged. Fl. Sep–Dec, fr. Nov–Mar. 2n = 40, 42.

Dense forests; 400–1400 m. S Fujian, Guangdong, Hainan, Taiwan, S and SE Yunnan [NE India, Indonesia, Japan (Ryukyu Islands), Laos, Malaysia, Myanmar, Philippines, Thailand, Vietnam].

**2.** Cephalantheropsis halconensis (Ames) S. S. Ying, Coloured Ill. Fl. Taiwan 3: 622. 1988.

## 铃花黄兰 ling hua huang lan

Phaius halconensis Ames, Philipp. J. Sci., C, 2: 323. 1907; Calanthe kooshunensis Fukuyama; Cephalantheropsis calanthoides (Ames) T. S. Liu & H. J. Su; C. gracilis (Lindley) S. Y. Hu var. calanthoides (Ames) T. P. Lin; Gastrorchis calanthoides (Ames) Z. H. Tsi, S. C. Chen & K. Mori; Phaius calanthoides Ames; P. gracilis (Lindley) S. S. Ying var. calanthoides (Ames) S. S. Ying; P. longipes (J. D. Hooker) Holttum var. calanthoides (Ames) T. P. Lin.

Plants 30–40 cm tall. Stem erect, cylindric, to 40 cm, ca. 5 mm in diam., several noded (internodes 3–5 cm), with several

tubular sheaths toward base, 4-7-leaved above. Leaves narrowly oblong or oblong,  $12-24 \times 1.8-4$  cm, base contracted and decurrent into sheaths, apex shortly acuminate. Inflorescence solitary, erect or ascending, slender, usually 20-35 cm, densely puberulent; peduncle with 3 or 4 scattered sheaths; rachis 6-14 cm, laxly 6- to more than 10-flowered; floral bracts caducous. Flowers nodding, not opening widely, white to pale yellow, all parts turning orange with age, lip white to pale yellow with a central yellow patch; pedicel and ovary ca. 15 mm. Sepals connivent, similar, ovate-lanceolate,  $8-9 \times 3.2-4$  mm, outer surfaces puberulent, 3-veined, apex acute to shortly acuminate. Petals ovate-oblong,  $8-9 \times 3-5$  mm, glabrous, 3-veined, apex acute; lip spreading, oblong-obovate,  $6-8 \times 4-5$  mm, 3-lobed above middle; lateral lobes erect, oblong, ca. 2 mm, without terminal auricles, apices subtruncate and irregularly incised; midlobe transversely oblong, ca.  $1.5 \times 4$ –4.5 mm (excluding claw), shortly clawed at base, margin usually strongly undulate, apex slightly emarginate; claw at base of mid-lobe ca. 1 mm; disk with a pair of yellow lamellae and many yellowish brown papillae between them. Column ca. 4 mm. Fl. Oct–Nov. 2n = 40.

Damp places in broad-leaved forests; 500-1300 m. Taiwan [Philippines].

**3.** Cephalantheropsis longipes (J. D. Hooker) Ormerod, Orchid Digest 62: 156. 1998.

## 白花黄兰 bai hua huang lan

Calanthe longipes J. D. Hooker, Fl. Brit. India 6: 195. 1890; Alismorkis longipes (J. D. Hooker) Kuntze; C. dolichopoda Fukuyama; Phaius longipes (J. D. Hooker) Holttum; P. mindorensis Ames.

Plants 30-50 cm tall. Stem erect, cvlindric, to 40 cm, 3-7 mm in diam., several noded (internodes 5-8 cm), with several tubular sheaths toward base, 5-8-leaved above. Leaves elliptic to elliptic-oblong, oblique,  $8-20 \times 2-5$  cm, base contracted and decurrent into sheaths, apex acute to shortly acuminate. Inflorescences 1 or 2, erect, 10-20 cm, slender, puberulent; peduncle with 3 or 4 scattered sheaths: rachis 2–9 cm. laxly 5–15-flowered; floral bracts caducous. Flowers spreading horizontally, not opening widely; sepals and petals white, lip white with a yellow band at center, all parts turning orange with age; pedicel and ovary 10-20 mm, puberulent. Sepals connivent or spreading, similar, lanceolate,  $6-8 \times ca$ . 2.5 mm, outer surfaces puberulent, apex acuminate. Petals ovate,  $5-6 \times 2-3$  mm, glabrous, apex acute; lip spreading, ovate-oblong,  $4.5-5 \times 3-4$  mm, 3-lobed above middle; lateral lobes erect, triangular-ovate, ca. 1.5 mm, without terminal auricles, apices subtruncate and irregularly incised; mid-lobe transversely oblong, ca.  $1.5 \times 3$  mm (excluding claw), shortly clawed at base, margin strongly undulate-crenulate, apex emarginate: claw at base of mid-lobe ca. 1.5 mm: disk with a pair of yellow lamellae extending from base of lip to base of mid-lobe. Column ca. 3 mm. Fl. Oct.

Forests; ca. 1200 m. SW Guangxi, Taiwan, SE Xizang, SE and W Yunnan [Bhutan, NE India, Myanmar, Philippines, Vietnam].

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