## 46. DIPLOMERIS D. Don, Prodr. Fl. Nepal. 26. 1825.

## 合柱兰属 he zhu lan shu

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

Diplochilus Lindley; Paragnathis Sprengel.

Herbs, terrestrial. Tubers subglobose, fleshy, unlobed, neck with several slender roots. Stem short, with 1 or 2 leaves. Leaves basal, ensiform to oblong, pubescent or glabrous. Inflorescence suberect, terminal, 1- or 2-flowered; floral bracts lanceolate, green. Flowers resupinate, large; ovary twisted, cylindric-fusiform. Sepals spreading, free, lanceolate, nearly equal in size. Petals longer and wider than sepals; lip flabellate, large, unlobed, glabrous, sessile or shortly clawed at base, spurred; spur decurved, elongate, cylindric, slender. Column very short, with 2 lateral appendages; anther with 2 slightly divergent locules; pollinia 2, clavate, granular-farinaceous, sectile, each attached by a long, slender caudicle to a viscidium; viscidia oblate, small, naked; rostellum erect, large, membranous, protruding between locules of anther; stigma lobes 2, elongate, oblong, convex, basally connate, diverging. Capsule ellipsoid.

Four species: Bhutan, Cambodia, China, NE India, Laos, N Myanmar, Nepal, Thailand, Vietnam; two species in China.

- 1a. Leaves usually 2, ensiform to linear-lanceolate, 0.5–1.8 cm wide; leaf, inflorescence, pedicel, and ovary glabrous
   1. D. pulchella

   1b. Leaf usually solitary, oblong, 1.4–3.8 cm wide; leaf, inflorescence, pedicel, and ovary pubescent
   2. D. hirsuta
- 1. Diplomeris pulchella D. Don, Prodr. Fl. Nepal. 26. 1825.

## 合柱兰 he zhu lan

Diplochilus longifolius Lindley; Diplomeris boxallii Rolfe; Habenaria uniflora (Roxburgh) Griffith; Orchis uniflora Roxburgh; Paragnathis pulchella (D. Don) Sprengel.

Plants 7.5–22.5 cm tall. Tubers ellipsoid, ca.  $10 \times 5$  mm. Leaves usually 2, basal, 1 larger than other, ensiform to linearlanceolate, 3-10 × 0.5-1.8 cm, glabrous, base contracted into amplexicaul sheath, apex acuminate. Inflorescence erect, 6-18 cm, glabrous; floral bract broadly ovate, ca. as long as to slightly exceeding ovary, glabrous, apex acute. Flower usually solitary, erect, white, large; ovary and pedicel 10-12 mm, glabrous. Sepals spreading, oblong-lanceolate or ovate-lanceolate, 15-18 × ca. 6 mm, outer surface carinate, glabrous, apex acute or acuminate. Petals spreading, broadly obovate or ovate-oblong,  $1.5-2.5 \times 1-1.5$  cm, apex acute; lip spreading, broadly obcordate, 1.8–2.8 × 1.5–2.2 cm, apex entire to shallowly emarginate and with a small acute tooth; spur pendulous, strongly incurved, cylindric, ca. 3.5 cm, slender, slightly thickened from middle toward apex, apex subacute to obtuse. Fl. Jul-Sep, fr. Oct.

Forests, grasslands; 600–2600 m. SW Guizhou, SW Sichuan, SE Xizang, NW Yunnan [NE India, Myanmar, Vietnam].

**2. Diplomeris hirsuta** (Lindley) Lindley, Gen. Sp. Orchid. Pl. 331, 1835.

## 毛叶合柱兰 mao ye he zhu lan

Diplochilus hirsutus Lindley, Edwards's Bot. Reg. 18: ad t. 1499. 1832; D. hirsutus var. biflorus Pradhan.

Plants 5–7 cm tall. Tubers subglobose to ellipsoid, 7–10  $\times$  5–7 mm. Leaf usually solitary, or occasionally with a second smaller subopposite leaf, basal, oblong, 3.5–8  $\times$  1.4–3.8 cm, pubescent, base directly sheathing stem, apex subacute. Inflorescence erect, 5–6 cm, pubescent; floral bracts broadly ovate, shorter than ovary, pubescent, apex acute. Flower solitary, erect, white, large; ovary and pedicel 11–15 mm, pubescent. Sepals spreading, ovate-oblong, 11–16  $\times$  8–12 mm, outer surface sparsely pubescent, apex acute. Petals spreading, orbicular-reniform, 10–21  $\times$  7–17 mm, apex subacute; lip spreading, broadly obovate, 16–22  $\times$  15–23 mm, apex entire to shallowly emarginate and with a small acute tooth; spur pendulous, strongly incurved, cylindric, 3.5–4.5 cm, slender, attenuate, apex acute. Fl. Jul–Aug.

Grasslands. S China [NE India, Nepal].