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Herbs, terrestrial. Pseudobulbs cornlike, ovoid or cylindrical, noded, with many fibrous, elongate roots at base and a coralloid rhizome beneath. Leaves 1 or 2, or rarely plants leafless (in which case holomycotrophic), arising directly from apex of pseudobulb, green, sometimes blotched with purple, narrowly ovate to narrowly elliptic, plicate, gradually contracted at base into a long petiole-like stalk, glabrous, apex acute. Inflorescence arising directly from apex of pseudobulb, erect, rather long, racemose, with 2 or 3 tubular sheaths below middle, glabrous; rachis subdensely to densely few or many flowered; floral bracts narrowly elliptic to lanceolate, small, apex acute. Flowers resupinate, ascending or pendulous, narrowly tubular; pedicel and ovary usually arculate, elongate, slender. Sepals and petals subsimilar, free, spreading or not, narrowly elliptic to linear, tapering gradually toward base; lip narrowly oblong-obovate, elongate, 3-lobed above middle, lateral margins involute, base shallowly saccate, not spurred; lateral lobes linear or narrowly oblong; mid-lobe oblong or obovate, with a fleshy callus at base. Column elongate, slightly dilated toward apex, with or without a pair of ventral wings; anther terminal, incumbent; pollinia 4, in 2 pairs, slightly laterally compressed, waxy, attached to a viscidium.

Four species: from Nepal, NE India, and Bhutan, through S and E China, to N Thailand, Vietnam, and Japan; three species (one endemic) in China.

1a. Leaves 2, deep green, blotched with purple; flowers suberect, opening widely; lip 13–18 mm, mid-lobe strongly deflexed ................................................................. 3. C. unguiculata

1b. Leaf usually solitary, rarely 2, green, lacking purple blotches; flowers pendulous, not opening widely; lip 20–34 mm, mid-lobe straight.

2a. Pseudobulbs cornlike, ovoid or subglobose, 1.5–3 cm; callus of lip positioned at base of mid-lobe, elongate, wrinkled to verruculose ................................................................. 1. C. appendiculata

2b. Pseudobulbs broadly cylindric, 10–14 cm; callus of lip positioned midway along mid-lobe, subglobose, smooth ................................................................. 2. C. guizhouensis


杜鹃兰 du juan lan

Plants 20–70 cm tall. Pseudobulb ovoid or subglobose, 1.5–3 × 1–3 cm, few noded. Leaf 1 or rarely 2, narrowly elliptic to narrowly obovate-lanceolate, 18–34 × 4–8 cm, mainly 3-veined, base subacute, apex acute or acuminate; petiole-like base 7–17 cm. Inflorescence 25–70 cm; rachis (5–)10–25 cm, subdensely to densely 5–22-flowered; floral bracts lanceolate to ovate-lanceolate, (3–)5–10 mm. Flowers fragrant, pendulous, not opening widely, pale purple to orange-brown, narrowly ovate-lanceolate, (3–)5–10 mm. Pedicel and ovary usually arcuate, elongate, wrinkled; column with narrow ventral wings, base shallowly saccate, not spurred; lateral lobes linear or narrowly oblong; mid-lobe oblong or obovate, with a fleshy callus at base. Column elongate, slightly dilated toward apex, with or without a pair of ventral wings; anther terminal, incumbent; pollinia 4, in 2 pairs, slightly laterally compressed, waxy, attached to a viscidium.

Wet places in forests, along valleys; 400–2900 m. Anhui, Chongqing, S Gansu, N Guangdong, Guangxi, Guizhou, Henan, Hubei, Hunan, Jiangsu, Jiangxi, S Shaanxi, S Shanxi, Sichuan, Taiwan, Xizang, SE Yunnan, Zhejiang [Bhutan, India, Japan, Korea, Nepal, Thailand, Vietnam].

1a. Callus on lip clavate, 4–5 mm, verruculose; column wings absent .................................................. 1a. var. appendiculata

1b. Callus on lip linear, 1–2 mm, wrinkled; column with narrow ventral wings ........................................ 1b. var. variabilis


Cymbidium appendiculatum D. Don, Prodr. Fl. Nepal. 36. 1825; Cremastra appendiculata var. variabilis (Hayata) S. S. Ying; C. bifolia C. L. Tso; C. triloba Hayata; C. wallachiana Lindley.

Plants 25–60 cm tall. Callus on lip clavate, 4–5 mm, verruculose. Column wings absent.

Forests; 1000–2900 m. Taiwan, Xizang, SE Yunnan [Bhutan, India, Nepal].


翅柱杜鹃兰 chi zhu du juan lan

Hyacinthorchis variabilis Blume, Mus. Bot. 1: 48. 1849; Cremastra appendiculata var. viridiflora (Honda) Averyanov; C. lanceolata (Kraenzlin) Schlechter; C. mitrata A. Gray; C. variabilis (Blume) Nakai; C. variabilis var. viridiflora Honda; Pogonia lanceolata Kraenzlin.

Plants 20–70 cm tall. Callus on lip linear, 1–2 mm, wrinkled. Column with narrow ventral wings.

Forests; 400–2000 m. Anhui, Chongqing, S Gansu, N Guangdong,

贵州杜鹃兰  gui zhou du juan lan

Plants 60–70 cm tall. Pseudobulb cylindric, 10–14 × 1.3–1.5 cm, thick, 4- or 5-noded. Leaf 1 or rarely 2, oblong-elliptic or narrowly elliptic-lanceolate, 18–31 × 3.5–9 cm, base cuneate, apex long acuminate; petiole-like base 6–8 cm. Inflorescence ca. 54 cm; rachis ca. 18 cm, densely 10–28-flowered; floral bracts linear-lanceolate, 10–15 mm. Flowers ± pendulous, not opening widely, yellow, narrowly campanulate; pedicel and ovary 7–10 mm. Sepals narrowly oblanceolate, 28–30 × 2–3.5 mm, apex acute or acuminate; lateral sepals slightly oblique. Petals narrowly oblanceolate to linear-oblanceolate, 25–28 × 2–3.5 mm, apex acuminate; lip linear-oblanceolate, 25–28 × 2.5–4 mm (though wider across lobes at apex), 3-lobed near apex; lateral lobes linear to linear-oblong, 4–5 × 1–1.5 mm, apex acute to obtuse; mid-lobe obovate or rhombic-obovate, 6–8 × 3–5 mm, margin ± undulate, apex obtuse; disk with a fleshy callus midway along mid-lobe; callus subglobose, ca. 1.5 mm, smooth. Column 25–28 mm, slender, slightly dilated at apex. Fl. May–Jun.

● Forest margins; 1300–1400 m. S Guizhou.


斑叶杜鹃兰  ban ye du juan lan


Plants 20–40 cm tall. Pseudobulbs ovoid or subglobose, ca. 1.5 cm in diam., 3- or 4-noded. Leaves 2, deep green and usually blotched with purple, narrowly elliptic, 10–15 × 2–3 cm, base cuneate, apex acuminate or acute; petiole-like base 2.5–6 cm. Inflorescence erect, to 30 cm, slender; rachis 10–13 cm, laxly 7–9-flowered; floral bracts ovate-lanceolate, 4–5 mm. Flowers suberect, opening widely, outer surface purplish brown, inner surfaces green, spotted with purplish brown, lip white; pedicel and ovary 9–13 mm. Sepals linear-oblanceolate or narrowly oblanceolate, 17–22 × ca. 2.5 mm, apex acute; lateral sepals slightly oblique. Petals narrowly oblanceolate to linear-oblanceolate, 15–20 × 1–1.5 mm, apex acute; lip narrowly spatulate, 13–18 × ca. 2.5 mm (though wider across lobes), 3-lobed above middle; lateral lobes linear, 1–1.5 mm, apex acute or obtuse; mid-lobe strongly deflexed, obovate, 5–6 × 2.5–3.5 mm, margin crisped and irregularly dentate-incised, apex obtuse; disk with a fleshy callus near base of mid-lobe; callus pulvinate, ca. 2 mm. Column 12–13 mm, slender. Fl. May–Jun. 2n = 50.

Mixed forests; 900–1000 m. Jiangxi [Japan, Korea].