

1. APOSTASIA Blume, Bijdr. 423. 1825.

拟兰属 ni lan shu

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

Adactylus (Endlicher) Rolfe; *Apostasia* [unranked] *Adactylus* Endlicher; *Niemeyera* F. Mueller (1867), not F. Mueller (1870).

Herbs, erect, glabrous. Rhizome scaly, producing a few proplike roots; roots sometimes bearing tubers. Stem simple or branched, rather slender, leafy. Leaves clustered or well spaced, plicate, usually recurved along margins, forming a tubular awn at apex, base contracted and then dilating and amplexicaul. Inflorescences terminal or subterminal, often arching or sometimes pendulous, usually branched; floral bracts relatively small. Flowers erect, not resupinate, almost actinomorphic; ovary 3-locular, slender, not distinct from pedicel. Sepals similar, cymbiform, slightly fleshy. Petals similar, yellow to white, cymbiform; lip similar to petals though sometimes slightly larger. Column erect or curved, with 2 fertile stamens, with or without a central staminode; anthers clasping style, with 2 locules of subequal to distinctly unequal length; filaments usually short, adnate to style; staminode (if present) opposite to dorsal sepal; pollen not cohering to form pollinia; style cylindrical; stigma terminal, capitate. Fruit a capsule, narrowly cylindrical, shallowly longitudinally 3-ribbed. Seeds black at maturity, with a rigid testa.

About seven species: NE India, Nepal, and Bhutan, north to S Japan, through SE Asia to New Guinea and N Australia; three species (one endemic) in China.

- 1a. Sepals 6–9 mm; anthers 4–5 mm; column with 2 quadrate projecting wings below staminode 1. *A. odorata*
- 1b. Sepals 4–6 mm; anthers 1.5–2.8 mm; column lacking wings.
 - 2a. Stem simple; leaves linear, 10–18 cm; inflorescence many flowered 2. *A. wallichii*
 - 2b. Stem branched; leaves ovate to ovate-lanceolate, 1.4–2.6 cm; inflorescence 1–4-flowered 3. *A. ramifera*

1. *Apostasia odorata* Blume, Bijdr. 423. 1825.

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Apostasia platystylis J. J. Smith; *A. selebica* J. J. Smith; *A. thorelii* Gagnepain.

Plants 15–40(–50) cm tall. Rhizome elongate; roots proplike, 1–3 mm in diam. Stem erect or prostrate toward base, usually not branched, with several tubular sheaths toward base. Leaves many; blade lanceolate to linear-lanceolate, 6–18 × 0.7–1.9 cm, apex with an awn 3–11 mm; petiole-like base 1–2 cm. Inflorescence terminal, often nodding, conic, with 1–3 lateral branches, usually more than 10-flowered; floral bracts ovate to ovate-lanceolate, 4–9 mm. Flowers ca. 1 cm in diam.; ovary and pedicel 15–22 mm. Sepals pale yellow, narrowly oblong, 6–9 × 1.5–2.4 mm, 3-veined, margin crisped, apex shortly mucronate. Petals similar to sepals but with thickened midvein, pale yellow; lip similar to petals, ca. 10 × 2.5 mm. Column ventrally with 2 projecting wings below staminode; wings quadrate, ca. 0.7 mm, longitudinally sulcate; filaments ca. 1 mm; anthers sublinear, 4–5 mm, base sagittate, apex apiculate, with locules unequal in length; staminode subcylindric, slightly shorter than style, adnate to style for most of its length though distal ca. 1 mm free; style 5–6 mm, extending slightly beyond anthers, apex with slightly dilated stigma. Capsule cylindrical, 15–20 × 2–3 mm. Fl. May–Jun, fr. Jun–Jul.

Forests; ca. 700 m. N and S Guangdong (Wengyuan, Zengcheng), SW Guangxi (Longzhou), Hainan, S Yunnan (Mengla, Simao) [Cambodia, India, Indonesia, Laos, Malaysia, Thailand, Vietnam].

2. *Apostasia wallichii* R. Brown in Wallich, Pl. Asiat. Rar. 1: 75. 1830.

剑叶拟兰 jian ye ni lan

Apostasia alba Rolfe; *A. curvata* J. J. Smith; *A. gracilis* Rolfe; *A. lucida* Blume ex Siebe; *A. papuana* Schlechter; *A. stylioides* (F. Mueller) H. G. Reichenbach; *Niemeyera stylioides* F. Mueller.

Plants ca. 40 cm tall. Rhizome short; roots proplike, 1.5–2.5 mm in diam. Stem suberect or prostrate toward base, not branched, with several tubular sheaths at base; sheaths to 1 cm, several veined. Leaves many, often clustered toward base of stem; blade linear to sublinear, 10–15(–18) × 0.7–1.2 cm, apex acuminate and with an awn 2–20 mm; petiole-like base 1–4 cm. Inflorescence arising from distal leaf axils, recurved, pendulous, or suberect, racemose or with a few lateral branches, 4–7 cm, many flowered; floral bracts lanceolate, 3–4 mm. Flowers 0.7–1 cm in diam.; pedicel and ovary 13–18 mm. Sepals yellow, linear to narrowly oblong-lanceolate, 4–6 × ca. 1.2 mm, 3–5-veined, apex mucronate. Petals similar to sepals, yellow; lip similar to petals but usually slightly broader. Column lacking wings; filaments ca. 0.5 mm; anthers narrowly ovoid, 1.5–2.5 mm, base sagittate; staminode subcylindric, adnate to style for most of its length though distal ca. 0.5 mm free; style ca. 3.5 mm, extending slightly beyond anthers, apex with slightly dilated stigma. Capsule cylindrical, 12–25 × 1.4–2 mm. Fl. Aug.

Tropical forests, crevices, along streams; ca. 1000 m. Hainan, SW Yunnan (Yingjiang) [Bangladesh, Cambodia, India, Indonesia, S Japan, Malaysia, Myanmar, Nepal, New Guinea, Philippines, Sri Lanka, Thailand, Vietnam; Australia].

3. *Apostasia ramifera* S. C. Chen & K. Y. Lang, Acta Phytotax. Sin. 24: 349. 1986.

多枝拟兰 duo zhi ni lan

Plants ca. 13 cm tall. Rhizome elongate. Stem suberect or prostrate toward base, branched, with several tubular sheaths at base; branches 1–3 cm. Leaves many, spaced along stem; blade ovate to ovate-lanceolate, 1.4–2.6 × 0.4–0.8(–1.2) cm, apex with an awn 1–2 mm; petiole-like base 0.7–1.5 cm. Inflorescence arising from leaf axils near apex of stem and branches, arching or pendulous, racemose, 1–2 cm, 1–4-flowered; floral bracts ovate to lanceolate, 2–4 mm, 3–5-veined. Flowers small, ca. 0.5 cm in diam.; ovary and pedicel 8–11 mm. Sepals spreading, oblong, 4–5 × ca. 1 mm, 3-veined, margin undulate, apex shortly mucronate. Petals similar to sepals but slightly shorter and broader, yellow; lip similar to petals. Column lacking wings but ventrally dilated and with 2 ridges below staminode; filaments ca. 0.5 mm; anthers narrowly ovoid, 2.5–2.8 mm, base sagittate, extending slightly beyond style; staminode slightly shorter than style, adnate to style for almost its entire length; style ca. 3 mm, apex with slightly dilated stigma. Capsule not known. Fl. May, fr. Jun.

- Dense forests. SW Hainan.

APOSTASIOIDEAE