## **34. DIPHYLAX** J. D. Hooker, Hooker's Icon. Pl. 19: ad t. 1865. 1889.

尖药兰属 jian yao lan shu

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

Herbs, terrestrial, small. Tubers ovoid to cylindric, fleshy. Stem erect, terete, short, glabrous, with 1 to several basal sheaths and 1–3 subradical leaves. Leaves lanceolate to elliptic, adaxially often with yellow or white reticulate veins, basally contracted into a petiole-like amplexicaul sheath. Inflorescence with 1 to several foliaceous sterile bracts, and with several to more than 20 secund flowers in a terminal raceme; floral bracts ovate to lanceolate. Flowers resupinate, small to medium-sized; ovary twisted, shortly pedicellate. Sepals and petals similar; sepals not widely spreading, narrowly ovate to lanceolate, subequal in size. Petals linear-oblong to lanceolate; lip usually decurved, linear-lanceolate or linear-ligulate, nearly as long as sepals, base concave, spurred, margin entire, lateral margins involute, apex acuminate; spur pendulous, urn-shaped, ellipsoid, or conic, shorter than ovary, contracted at neck. Column very short with 2 elongate lateral appendages; anther erect, 2-locular, locules contiguous, parallel; connective distinct; rostellum small to elongate; pollinia 2, clavate, granular-farinaceous, sectile, each attached by short caudicle to naked viscidia; stigma entire, large, raised. Capsule ovoid.

Three species: SW China to the Himalayas; three species (two endemic) in China.

- 1b. Leaves spatulate, ovate, or elliptic; sepals ca. 7 mm or more; lip ca. 8 mm; spur ellipsoid or ellipsoid-cylindric; staminodes oblong, ovate, or obovate, relatively short, terminating below apex of anther locules.
- **1. Diphylax urceolata** (C. B. Clarke) J. D. Hooker, Hooker's Icon. Pl. 19: ad t. 1865. 1889.

尖药兰 jian yao lan

Habenaria urceolata C. B. Clarke, J. Linn. Soc., Bot. 25: 73. 1889.

Plants 8-10 cm tall. Stem often slightly curved, slender, with 1 or 2 tubular sheaths at base and 1 large leaf above. Leaf oblong to oblong-lanceolate, 3-3.5 × 1-1.2 cm, adaxially with white venation, apex acute. Inflorescence with several to 12 secund flowers; foliaceous sterile bracts 1 or 2, lanceolate, 0.8- $1 \times 0.1$ –0.4 cm, apex acute; rachis 2.5–3 cm; floral bracts ovate or lanceolate, ca. as long as ovary. Flowers white, greenish white, or pink, small; ovary fusiform, 4-5 mm including pedicel. Sepals lanceolate, ca. 5 × 1.5 mm, 1-veined, apex acute. Petals connivent with dorsal sepal and forming a hood, linearoblong, ca. 4.5 × 1.5 mm, 1-veined, apex obtuse; lip decurved, linear-lanceolate, ca. 4.5 mm, lateral margins above middle to apex involute and forming a tube, concave at base, apex acuminate; spur urn-shaped, 2.5-3 mm, shorter than ovary. Column 1–2 mm; apex of connective lanceolate, protruding from anther; rostellum very small; lateral appendages linear, extending as far as or beyond apex of anther locules. Fl. Aug-Oct.

Forests; 1900–3800 m. W Sichuan, NW Yunnan [Bhutan, NE India, N Myanmar, Nepal].

**2. Diphylax contigua** (Tang & F. T. Wang) Tang, F. T. Wang & K. Y. Lang, Vasc. Pl. Hengduan Mts. 2: 2526. 1994.

长苞尖药兰 chang bao jian yao lan

Platanthera contigua Tang & F. T. Wang, Bull. Fan Mem. Inst. Biol. Bot. 10: 28. 1940.

Plants 20-24 cm tall. Stem sometimes slightly curved, ca. 2 mm in diam., with up to 5 tubular sheaths at base and (1 or)2 or 3 leaves above. Leaves spatulate to lorate-spatulate, 7–13 × 1.2-2.2 cm, apex acute. Inflorescence with more than 10 often secund flowers; foliaceous sterile bracts 2 or 3, lanceolate, 1.5- $5 \times 0.4$ –0.7 cm, apex acuminate; rachis to 5.5 cm; floral bracts lanceolate, longer than ovary, apex acuminate. Flowers greenish white, medium-sized; ovary fusiform, 8-10 mm including pedicel, glabrous. Sepals lanceolate, 1-veined, apex acuminate; dorsal sepal ca. 8 × 2.5 mm; lateral sepals slightly oblique, ca. 8.5  $\times$  2.8 mm. Petals  $\pm$  connivent with dorsal sepal and forming a hood, obliquely lanceolate, ca.  $7.5 \times 2$  mm, 1-veined, apex subacute; lip slightly decurved, linear-oblong, ca. 8 × 2 mm, fleshy, lateral margins above middle to apex involute and forming a tube, slightly dilated at base, apex subacute; disk pubescent on central veins; spur ellipsoid, ca. 5 × 2.5 mm, inner surface densely pubescent, apex obtuse. Column ca. 3 mm; anther ca. 2 mm; apex of connective oblong, protruding from anther; rostellum very small; lateral appendages oblong, short, terminating below apex of anther locules. Fl. Sep.

- Bamboo forests; ca. 3200 m. NW Yunnan.
- **3. Diphylax uniformis** (Tang & F. T. Wang) Tang, F. T. Wang & K. Y. Lang, Bot. Res. Acad. Sin. 4: 11. 1989.

西南尖药兰 xi nan jian yao lan

Platanthera uniformis Tang & F. T. Wang, Bull. Fan Mem.

Inst. Biol. Bot. 10: 31. 1940; P. opsimantha Tang & F. T. Wang.

Plants 10-18.5 cm tall. Stem with 1 or 2 tubular sheaths at base and 1(or 2) leaves above. Leaf elliptic to ovate,  $3-6 \times 1.5-$ 3 cm, apex acute. Inflorescence with several to more than 20 secund flowers; foliaceous sterile bracts 4, lanceolate, 0.7–1.5 × 0.3-0.6 cm, apex acute; rachis 3-7 cm; floral bracts lanceolate, shorter than ovary, apex acuminate. Flowers white, mediumsized; ovary fusiform, ca. 7 mm including pedicel, glabrous. Dorsal sepal linear-lanceolate, ca. 8 × 2 mm, 1-veined, base concave, apex obtuse; lateral sepals linear-lanceolate, slightly falcate, ca. 7 × 1.5 mm, 1-veined, apex obtuse. Petals firmly adnate to sepals, nearly as long as lateral sepals, 1-veined, apex obtuse; lip slightly decurved, linear-oblong, ca. 8 × 1.5 mm, slightly dilated at base, lateral margins above middle to apex involute and forming a tube, apex obtuse; spur ellipsoid-cylindric, ca. 4.5 × 2.5 mm, apex obtuse. Column ca. 2 mm; anther ca. 1 mm; apex of connective slightly convex at anther apex; rostellum very small; lateral appendages ovate to obovate, terminating at or slightly below apex of anther locules. Fl. Aug-Sep.

• Rocky slopes, mossy outcrops in dense forests; 1800–3200 m. Guizhou (Fanjing Shan), Sichuan (Min Jiang), NW Yunnan.

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