

102. ACANTHEPHIPIUM Blume, Bijdr. 353. 1825 [*“Acanthophippium”*].

坛花兰属 tan hua lan shu

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

Herbs, terrestrial. Rhizome short, inconspicuous. Pseudobulbs ovoid, ovoid-cylindric, or clavate, fleshy, with a few internodes, usually covered with several membranous scalelike sheaths, with several stout, fleshy roots at base and 1–4 leaves at apex. Leaves ovate, elliptic, or obovate, large, convolute, plicate, base contracted and sheathing, articulate. New shoot arising from base of pseudobulb. Inflorescence borne laterally from a new shoot or from a lower node on pseudobulb, erect, short, unbranched, fleshy; peduncle usually enclosed by several large imbricate sheaths; rachis few flowered; floral bracts large, foliaceous. Flowers resupinate, large, fleshy; pedicel and ovary ellipsoid, sometimes sparsely pubescent, thickening after anthesis. Sepals connate at base and forming gibbous, urceolate tube, free at apex; dorsal sepal oblong to obovate, concave; lateral sepals oblong, oblique and broad at base, adnate to column foot at base and forming an urceolate mentum. Petals enclosed within sepaline tube, elliptic to spatulate, base shortly decurrent along column foot; lip small, articulate at apex of column foot, 3-lobed; lateral lobes erect; mid-lobe reflexed, triangular or oblong, short; disk with a series of lamellae or keels that run longitudinally between lateral lobes. Column elongate, dilated toward apex, sometimes winged, with a column foot at base; column foot very long, inflexed at middle, recurved toward apex; anther subglobose to ovoid, 2-locular; pollinia 8, in 2 groups of 4, subobovoid, unequal in size, waxy, each group attached to a sticky viscidium by a broad caudicle; rostellum broadly ovate; stigma broadly obovoid, entire. Capsule erect, ellipsoid, ridged.

Eleven species: from S and NE India and Bangladesh, throughout SE Asia, to S Japan, New Guinea, and the SW Pacific islands; three species in China.

Sprague (Bull. Misc. Inform. Kew 1928: 341. 1928) explained that the spelling in the protologue, *“Acanthophippium,”* was an orthographical error and that *Acanthephippium* was the correct spelling. Garay and Sweet (Orchids S. Ryukyu Islands, 129. 1974) endorsed Sprague’s view.

- 1a. Leaf usually solitary, rarely 2; lip membranous; disk with a solitary ridge; mentum conic and spurlike, tapering toward apex 1. *A. striatum*
- 1b. Leaves 2–4; lip fleshy; disk with 3–5 lamellae or ridges; mentum saccate, with an obtuse-rounded apex.
 - 2a. Disk with 3–5 toothed lamellae; column foot ca. 40 mm 2. *A. sylhetense*
 - 2b. Disk with 3 low ridges; column foot 18–20 mm 3. *A. gouahense*

1. **Acanthephippium striatum** Lindley, Edwards’s Bot. Reg. 24(Misc.): 41. 1838.

锥囊坛花兰 zhui nang tan hua lan

Acanthephippium simplex Averyanov; *A. sinense* Rolfe; *A. unguiculatum* (Hayata) Fukuyama; *Tainia unguiculata* Hayata.

Plants to 50 cm tall. Roots densely pubescent. Pseudobulb narrowly ovoid, 6–10 × 1–3 cm, 3- or 4-noded, with several membranous sheaths, 1- or rarely 2-leaved. Leaf elliptic to oblong, 20–30 × 7–14.5 cm, usually 5-veined, apex acute; petiole-like base ca. 3 cm and sheathing. Inflorescence 10–13 cm, with several scalelike membranous sheaths; rachis densely 4–6-flowered; floral bracts ovate-oblong, cymbiform, 3–3.5 cm, apex acute. Flowers creamy white with parallel red venation, tubular, 35–45 mm; pedicel and ovary 30–35 mm, sparsely pubescent or glabrate. Dorsal sepal elliptic, 20–25 × 10–13 mm, 7-veined, apex obtuse; lateral sepals oblong-triangular, slightly oblique, 26–35 × 15–20 mm, 5–7-veined, base adnate to column foot, apex subacute and recurved. Petals oblong-obovate, 20–25 × 10–12 mm, fleshy, 7-veined, apex obtuse or acute; lip adnate to apex of column foot, 20–25 mm, membranous, 3-lobed; lateral lobes erect, falcate-triangular, 10–12 mm; mid-lobe with red spots or blotches, ovate-triangular, small, ca. 8 mm, margin slightly undulate, apex acute, recurved; disk with a solitary broad yellow ridge; mentum formed by bases of lateral sepals and column foot, conic and spurlike, tapering toward apex, longer than column. Column 10–15 mm; column foot 30–40 mm, inflexed at its mid-point through an angle of 30–40°,

adnate to base of lateral sepals for ca. 1/2 of its length, slightly recurved toward apex; anther ca. 3 mm; larger pollinia to ca. 2.2 mm, smaller pollinia ca. 1.5 mm; rostellum flaplike, triangular, entire; stigma broadly obovoid. Capsule 40–60 mm. Fl. Apr–Jun.

Shaded and humid places in dense forests, banks of streams, along valleys; 400–1500 m. S Fujian, SW Guangxi, Taiwan, S and SE Yunnan [NE India, Indonesia, Malaysia, Nepal, Thailand, Vietnam].

2. **Acanthephippium sylhetense** Lindley, Gen. Sp. Orchid. Pl. 177. 1833.

坛花兰 tan hua lan

Acanthephippium curtisii H. G. Reichenbach var. *albidum* Linden; *A. pictum* Fukuyama; *A. ringiflorum* Griffith; *A. sylhetense* var. *pictum* (Fukuyama) Hashimoto; *A. yamamotoi* Hayata.

Plants to 50 cm tall. Roots elongate. Pseudobulb ovoid-cylindric, 7–15 × 1.5–4 cm, 2–4-noded, with several large scalelike sheaths, 2–4-leaved. Leaves elliptic to oblong-elliptic, 30–40 × 8–11 cm, 5-veined, apex acuminate; petiole-like base ca. 2 cm, sheathing. Inflorescence 15–20 cm, fleshy, with several broadly ovate-lanceolate sheaths at base; rachis densely 3–5-flowered; floral bracts deep purple, ovate to oblong, concave, 2–2.5 cm, apex acute. Flowers white or yellow with purplish brown spots, campanulate-tubular, 40–45 mm; pedicel and ovary pale purple, 30–40 mm, sparsely pubescent. Sepals connate at base and connivent above, forming an urceolate tube

with apices free; dorsal sepal subelliptic, 20–30 × 10–15 mm, 7-veined, apex obtuse; lateral sepals triangular to oblong, oblique, ca. 40 × 17–20 mm, 7-veined, base adnate to column foot, apex obtuse. Petals elliptic-obovate, 20–25 × 10–14 mm, fleshy, 5-veined, apex obtuse; lip adnate to apex of column foot, ca. 15 mm, fleshy, 3-lobed; lateral lobes erect, white, falcate, embracing column, ca. 8 mm; mid-lobe lemon-yellow, ligulate, 6–8 mm, apex obtuse, strongly recurved; disk white with purplish brown spots, fleshy, with 3–5 toothed lamellae; mentum formed by bases of lateral sepals and column foot, yellow with yellowish brown stripes, saccate, short, apex obtuse-rounded. Column white, ca. 15 mm; column foot white, tinged with purple, ca. 40 mm, inflexed at its mid-point through an angle of 30–40°, adnate to base of lateral sepals for ca. 1/2 of its length, slightly recurved toward apex; anther ca. 3 mm; larger pollinia ca. 2 mm, smaller pollinia ca. 1 mm; rostellum truncate; stigma broadly obovoid. Capsule to 60 mm. Fl. Apr–Jul.

Damp places in dense forests, along valleys; 500–800 m. Taiwan, S Yunnan [Bangladesh, NE India, Japan, Laos, Malaysia, Myanmar, Thailand].

3. *Acanthephippium gougahense* (Guillaumin) Seidenfaden, *Contr. Revis. Orchid Fl. Cambodia, Laos & Vietnam*, 4. 1975.

中华坛花兰 *zhong hua tan hua lan*

Calanthe gougahensis Guillaumin, *Bull. Mus. Natl. Hist. Nat.*, sér. 2, 26: 537. 1954; *Acanthephippium odoratum* Averyanov; *A. thailandicum* Seidenfaden.

Plants to 50 cm tall. Roots short. Pseudobulb ovoid-cylindrical, 5–7 × ca. 1 cm, 4-noded, with several large membranous sheaths, 2–4-leaved. Leaves broadly obovate-elliptic, 22–24 × ca. 7 cm, 3-veined, apex acuminate or acute; petiole-like base 2–10 cm, sheathing. Inflorescence 10–15 cm, fleshy, with several scalelike sheaths at base; rachis densely 2–5-flowered; floral bracts oblong-lanceolate, 2.5–3 cm, apex acuminate. Flowers creamy white with faint red striations on outer surface, campanulate-tubular, ca. 30 mm; pedicel and ovary 13–15 mm. Sepals connate at base and connivent above, forming an urceolate tube with apices free; dorsal sepal broadly elliptic-oblong, 18–20 × 8–9 mm, 3–5-veined, apex obtuse; lateral sepals ovate, oblique, 18–20 × 12–13 mm, 5-veined, base adnate to column foot, apex subobtuse. Petals narrowly ovate-oblong, ca. 20 × 7

mm, fleshy, 5-veined, apex subacuminate; lip adnate to apex of column foot, creamy white, ca. 10 mm, fleshy, 3-lobed; lateral lobes erect, creamy white with brownish purple markings, hatchet-shaped, 5–8 mm, margins slightly incurved; mid-lobe yellow, rhombic-triangular, 5–8 × 4–7 mm, apex acute, recurved; disk papillose, fleshy between 2 lateral lobes, with 3 low, rounded ridges; mentum formed by bases of lateral sepals and column foot, saccate, apex obtuse-rounded. Column white, ca. 13 mm; column foot 18–20 mm, inflexed at its mid-point through an angle of 60°, adnate to base of lateral sepals for ca. 1/2 of its length, slightly recurved toward apex; anther ca. 4 mm; larger pollinia ca. 1.5 mm, smaller pollinia ca. 0.8 mm; rostellum truncate with an apiculate tip; stigma broadly obovoid. Fl. Apr–May.

Forests; ca. 300 m. Guangdong [Thailand, S Vietnam].

The name *Acanthephippium sinense* (a synonym of *A. striatum*) has been misapplied to material of this species by some authors.

