

15. CHASSALIA Commerson ex Poiret in Lamarck, *Encycl. Suppl.* 2: 450. 1812.

弯管花属 *wan guan hua shu*

Chen Tao (陈涛); Charlotte M. Taylor

Shrubs, subshrubs, or small trees, unarmed. Raphides present. Leaves opposite or in whorls of 3, sometimes with domatia; stipules persistent or sometimes with top portion deciduous, interpetiolar or united around stem, triangular to bifid, sometimes with basal portion becoming hardened, sometimes glandular at apex or on short appendages. Inflorescence terminal, thyriform to cymose, many flowered, sessile to pedunculate, bracteate. Flowers sessile or pedicellate, bisexual, usually distylous. Calyx limb 5-lobed [to truncate or denticulate]. Corolla white to pink or pale yellow, tubular to funnelliform, with tube often curved, variously glabrous or pubescent inside; lobes 5, valvate in bud. Stamens 5, inserted in corolla tube, included or exserted; filaments short or absent; anthers dorsifixed. Ovary 2-celled, ovules 1 in each cell, basal; stigmas 2, linear, included or exserted. Infructescence frequently becoming purple with axes swollen and jointed. Fruit purple to black, drupaceous, fleshy, ellipsoid, subglobose, or ovoid, with calyx limb persistent; pyrenes 2, plano-convex, 1-celled, each with 1 seed, smooth on dorsal surface, on ventral surface with a large concave excavation; seeds medium-sized, compressed orbicular; endosperm fleshy; radicle cylindrical, basiscopic.

About 40 species: widespread in tropical Africa, Asia, and Madagascar, and the Mascarene Islands; one species in China.

1. *Chassalia curviflora* (Wallich) Thwaites, *Enum. Pl. Zeyl.* 150. 1859.

弯管花 *wan guan hua*

Subshrubs, erect, 1–2 m tall; branches weakly flattened to subterete, glabrous or rarely sparsely puberulent. Leaves opposite; petiole 1–4 cm, glabrous; blade drying membranous to thinly papery and often yellowish green, oblong-elliptic, elliptic, oblanceolate, or narrowly lanceolate, 6–27 × 1.5–7.5 cm, glabrous, base cuneate to attenuate, apex acuminate to long acuminate; secondary veins 8–17 pairs, without domatia; stipules persistent, united shortly around stem, with interpetiolar portion broadly ovate or broadly triangular, 1.5–4.5 mm, acute or obtuse, entire or usually shortly bifid, with 1 or 2 bristles 0.3–1 mm, often gland-tipped. Inflorescence cymose, pyramidal to rounded, several to many flowered, puberulent; peduncle 1–5 cm; branched portion 3–7 cm; axes weakly flattened; bracts lanceolate to triangular or usually multifid, 0.5–3 mm. Flowers subsessile, trimorphic: with anthers exserted and stigmas included, with anthers included and stigmas exserted, or with anthers and stigmas both exserted. Calyx with hypanthium portion ellipsoid to obovoid, 1–1.5 mm, glabrous; limb 5-lobed, 0.5–1 mm; lobes 0.3–0.5 mm, acute. Corolla white with pink, red, or orange on lobes, outside glabrous to sparsely puberulent and longitudinally ridged to winged along tube then midribs of lobes; tube shallowly to markedly curved, straight or bent at base, 10–15 mm, pubescent inside; lobes (4 or)5, ovate-triangular, 2–2.5 mm, at apex thickened. Infructescence axes becoming swollen and red. Fruit purple, oblate to globose or weakly didymous, 5–7 × 6–9 mm. Fl. Apr–Jun, fr. Apr–Jan.

Wet places, forest understories, at low elevations; 100–2000 m. Guangdong, Guangxi, Hainan, Xizang, Yunnan [Bangladesh, Bhutan, Borneo, Cambodia, E and NE India (including Andaman Islands), Indonesia, Malaysia, Philippines, Singapore, Sri Lanka, Thailand, Vietnam].

At anthesis the corolla tube curves upward so that the base of the tube is suberect, the middle portion of the tube arcs toward the horizontal, and the mouth of the corolla opens outward to the side (Puff et al., *Rubiaceae of Thailand*, 101. 2005). Other authors have found this species distylous with the flowers 5-merous or infrequently 4-merous on aberrant individual flowers, as in many Rubiaceae; H. S. Lo (in

FRPS 71(2): 61. 1999) described it as tristylous with often 4 corolla lobes.

1a. Leaves oblong-elliptic, elliptic, or oblanceolate, 6–27 × 2.5–7.5 cm, with secondary veins distinct on adaxial surface 1a. var. *curviflora*

1b. Leaves narrowly lanceolate, 13–27 × 1.5–4.5 cm, with secondary veins distinct to indistinct on adaxial surface 1b. var. *longifolia*

1a. *Chassalia curviflora* var. *curviflora*

弯管花(原变种) *wan guan hua (yuan bian zhong)*

Psychotria curviflora Wallich in Roxburgh, *Fl. Ind.* 2: 167. 1824.

Leaves oblong-elliptic, elliptic, or oblanceolate, 6–27 × 2.5–7.5 cm; secondary veins distinct on adaxial surface. Fl. Apr–Jun, fr. Apr–Jan.

Wet places, forest understories; 100–2000 m. Guangdong, Guangxi, Hainan, Xizang, Yunnan [Bangladesh, Bhutan, Borneo, Cambodia, E and NE India (including Andaman Islands), Indonesia, Malaysia, Philippines, Singapore, Sri Lanka, Thailand, Vietnam].

1b. *Chassalia curviflora* var. *longifolia* J. D. Hooker, *Fl. Brit. India* 3: 177. 1880.

尖叶弯管花 *jian ye wan guan hua*

Psychotria longifolia Dalzell, Hooker's *J. Bot. Kew Gard. Misc.* 2: 133. 1850, not Hoffmannsegg ex Roemer & Schultes (1819), nor Sprengel (1824); *Chassalia longifolia* K. M. Wong.

Leaves narrowly lanceolate, 13–27 × 1.5–4.5 cm; secondary veins distinct or often indistinct on adaxial surface. Fl. May, fr. Jul.

Wet places, forest understories; 100–2000 m. Guangdong, Guangxi, Hainan, Xizang, Yunnan [Bangladesh, Bhutan, Borneo, Cambodia, E and NE India (including Andaman Islands), Indonesia, Malaysia, Philippines, Singapore, Sri Lanka, Thailand, Vietnam].

Plants that match this variety are uncommonly collected and are

Fl. China 19: 87–88. 2011.

provisionally separated here.

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