13. CEPHALANTHUS Linnaeus, Sp. Pl. 1: 95. 1753.

风箱树属 feng xiang shu shu

Chen Tao (陈涛); Charlotte M. Taylor

Shrubs or trees, unarmed; buds conical. Raphides absent. Leaves verticillate or opposite, distichous, usually with domatia; stipules persistent [or sometimes caducous], interpetiolar, triangular, at apex sometimes with a black gland. Inflorescences terminal and sometimes in axils of uppermost leaves, capitate with several globose heads, many flowered, pedunculate, bracteate; bracteoles clavate to clavate-spatulate. Flowers sessile, bisexual, monomorphic. Calyx limb 4(or 5)-lobed. Corolla white to cream, salverform to funnelform, variously pubescent inside; lobes 4, imbricate (and quincuncial) in bud. Stamens 4, inserted in corolla throat, partially exserted; filaments short; anthers dorsifixed, biffd at base. Ovary 2-celled, ovules 1 in each cell, apical and pendulous, anatropous; stigma clavate to capitate, exserted. Fruiting heads globose. Fruit schizocarpous, obconic to turbinate, dry, with calyx limb persistent; mericarps 2, indehiscent, with 1 seed, obconic, stiffly papery; seeds medium-sized, oblong-ellipsoid, with white spongy aril.

Six species: three in the Americas, two in Asia, one in Africa; one species in China.

1. Cephalanthus tetrandrus (Roxburgh) Ridsdale & Bakhuizen f., Blumea 23: 182. 1976 [*"tetrandra"*].

风箱树 feng xiang shu

Nauclea tetrandra Roxburgh, Fl. Ind. 2: 125. 1824; Cephalanthus glabrifolius Hayata; C. naucleoides Candolle; C. ratoensis Hayata.

Deciduous shrubs or small trees, 1-5 m tall; branches subangled to terete, densely pilosulous or tomentulose to usually glabrous. Leaves opposite or in whorls of 3-5, with number often irregular on a stem; petiole 5-10 mm, densely tomentulose or pilosulous to usually glabrous; blade drying stiffly papery to subleathery, ovate to ovate-lanceolate, elliptic, or elliptic-oblong, 6.5-15 × 3-6 cm, adaxially glabrous to sparsely puberulent and often rugulose, abaxially densely pilosulous to usually glabrous, base obtuse, rounded, or subcordate, apex acute to acuminate; secondary veins 8-12 pairs, often with pilosulous domatia in axils or along costa; stipules persistent or often deciduous leaving a persistent truncate basal portion, broadly ovate, 3-5 mm, adaxially enclosing a ring of persistent white trichomes 0.5-1 mm, abaxially glabrous to occasionally densely pilosulous, apex cuspidate, often with a black terminal gland. Inflorescence densely tomentulose or pilosulous to usually glabrous; peduncles 2.5-6 cm; flowering heads 1-10, 8-12 mm in diam. across calyces, 20-25 mm in diam. across corollas; bracteoles linear-clavate, ca. 2 mm, strigose. Calyx with ovary portion obconic, ca. 1 mm, glabrous, surrounded at base by ring of pilose trichomes; limb with tubular portion 1–2 mm, glabrous to sparsely puberulent; lobes spatulate-oblong, 1–2 mm, densely puberulent, obtuse to rounded, in sinuses usually with stipitate or sessile black gland. Corolla outside glabrous; tube 7–12 mm, pubescent inside; lobes spatulate-oblong, 1–2 mm, obtuse or rounded, in sinuses often with stipitate black gland. Stigma ellipsoid or clavate, ca. 0.5 mm, exserted by 4-6 mm. Fruiting head 10-20 mm in diam. Mericarps 4-6 mm, glabrous; seeds brown, 3-5 mm. Fl. Jun-Sep, fr. Jul-Sep.

Shady sites at roadsides or streamsides; sea level to 700 m. Fujian, Guangdong, Guangxi, Hainan, Hunan, Jiangxi, Taiwan, Yunnan, Zhe-

jiang [Bangladesh, India, Laos, Myanmar, Thailand, Vietnam].

This species was long considered conspecific with *Cephalanthus occidentalis* Linnaeus of North America; consequently, that name has been frequently but erroneous used for the Asian plants. Ridsdale (Blumea 23: 177–188. 1976) concluded that only one species of *Cephalanthus* is found in Asia and it is distinct from the North American species. Ridsdale (loc. cit.: 180–181) reported that this species is tolerant of wet soils and sometimes cultivated for ground stabilization.