

13. CALOTROPIS R. Brown, Mem. Wern. Nat. Hist. Soc. 1: 39. 1810 (preprint).

牛角瓜属 niu jiao gua shu

Shrubs erect, canescent. Leaves opposite, broad, subsessile. Cymes extra-axillary or terminal, umbel-like, long pedunculate. Calyx with basal glands. Corolla bowl-shaped to subrotate, divided to middle; lobes valvate or overlapping to right. Corona lobes 5, adnate to gynostegium, fleshy, laterally compressed, apex with a tubercle on each side, with abaxial, basal, revolute spur. Filaments connate; anther appendages incurved; pollinia 2 per pollinarium, oblong, pendulous. Styles long; stigma head slightly convex. Follicles ovoid, subglobose, or oblong-lanceolate, mesocarp inflated.

Three species: northern Africa, Arabia, and tropical Asia; two species in China.

- 1a. Flower buds cylindric; corolla 2.5–3.5 cm in diam., lobes long ovate or oblong, 1–1.5 cm, usually reflexed; corona shorter than gynostegium ..... 1. *C. gigantea*
- 1b. Flower buds subglobose; corolla 1.5–2 cm in diam., lobes broadly ovate or ovate-triangular, 0.7–1 cm, not reflexed; corona as long as gynostegium ..... 2. *C. procera*

1. *Calotropis gigantea* (Linnaeus) W. T. Aiton, Hortus Kew. ed. 2, 2: 78. 1811.

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*Asclepias gigantea* Linnaeus, Sp. Pl. 1: 214. 1753; *Periploca cochinchinensis* Loureiro; *Streptocaulon cochinchinense* (Loureiro) G. Don.

Shrubs 1–5 m tall. Petiole 1–4 mm; leaf blade obovate-oblong or oblong, 7–30 × 3–15 cm, base cordate, apex obtuse, cottony tomentose when young, frequently glabrescent and glaucous green; lateral veins 4–8 pairs. Cymes umbel-like, with fine woolly hairs; peduncle robust, 5–12 cm. Pedicel thick, 2–5 cm. Calyx almost flat, 1.2–1.5 cm in diam. Flower buds cylindric. Corolla usually purplish or lilac with paler greenish base, 2.5–3.5 cm in diam., fleshy, glabrous; lobes ovate, 1–1.5 × 0.6–1 cm, spreading or reflexed, margin revolute. Corona shorter than gynostegium. Follicles obliquely elliptic to oblong-lanceolate in outline, 5–10 × 2.5–4 cm, both ends incurved. Seeds broadly ovate, 5–7 × 3–4 mm; coma 2.5–4 cm. Fl. almost throughout the year.  $2n = 22$ .

Woods of dry areas, stream banks; 0–1400 m. Guangdong, Guangxi, Hainan, Sichuan, Yunnan [India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Pakistan, Sri Lanka, Thailand, Vietnam; tropical Africa].

The bark is used as a medicine for the treatment of neurodermatitis and syphilis, and the leaves are used as a poultice. The juice is used in making a yellow dye and in tanning. A fine fiber is obtained from the stems.

2. *Calotropis procera* (Aiton) W. T. Aiton, Hortus Kew. ed. 2, 2: 78. 1811.

白花牛角瓜 bai hua niu jiao gua

*Asclepias procera* Aiton, Hort. Kew. 1: 305. 1789; *A. gigantea* Jacquin, not Linnaeus.

Shrubs or small trees to 6 m tall. Petiole very short; leaf blade grayish green or hoary white, ovate to obovate, 10–30 × 5–15 cm, base cordate, apex abruptly pointed. Cymes umbel-like, 3–10-flowered, finely woolly; peduncle 2–5.5 cm. Pedicel 1.5–2.5 cm. Sepals elliptic or ovate, ca. 5 × 3 mm. Flower buds subglobose. Corolla white outside, pinkish

inside, 1.5–2 cm in diam.; lobes with purple-brown apices, broadly ovate or ovate-triangular, 7–10 × 6–10 mm, spreading. Corona as long as gynostegium. Follicles subglobose to obliquely ovoid, inflated, 6–10 × 3–7 cm, pericarp thick, spongy. Seeds ca. 6 × 4 mm; coma 3.5–5 cm. Fl. May–Dec.  $2n = 22$ .

Cultivated for medicine in S Guangdong, Guangxi, S Yunnan [Afghanistan, India, Myanmar, Nepal, Pakistan, Thailand, Vietnam; Africa, SW Asia, introduced to Australia and Central and South America].

The bark and leaves are used for the treatment of leprosy and asthma, respectively.

