

33. SOLENA Loureiro, Fl. Cochinch. 2: 477, 514. 1790.

茅瓜属 mao gua shu

Lu Anmin (路安民 Lu An-ming); Charles Jeffrey

Herbs, scandent, perennial. Roots tuberous. Stem and branches slender, subglabrous. Tendrils simple, glabrous. Petiole very short or almost obsolete; leaf blade polymorphic, very variable, base cordate or hastate. Plants dioecious or monoecious. Male flowers in umbelliform or cymose inflorescence; calyx tube campanulate; segments 5, ± subulate; corolla yellow or yellow-white; segments triangular; stamens 3, two 2-celled, one 1-celled; filaments short; anthers oblong; anther cells conduplicate or curved. Female flowers solitary; ovary oblong; ovules few, horizontal; staminodes 3. Fruit oblong or ovoid, indehiscent. Seeds few, globose.

Three species: S and SE Asia; one species in China.

1. *Solena heterophylla* Loureiro, Fl. Cochinch. 2: 514. 1790.

茅瓜 mao gua

Roots fusiform, 1.5–2 cm in diam. Stem and branches glabrous. Petiole slender, 4–10 mm, puberulent at first, glabrescent; leaf blade very variable, ovate, oblong, ovate-triangular, or hastate, undivided or 3–5-lobed, leathery; lobes oblong-lanceolate, lanceolate, or triangular, 8–12 × 1–5 cm, abaxially densely setose or almost glabrous, adaxially densely setose or scabrous, base cordate, margin entire or dentate, apex obtuse or acuminate. Tendrils slender. Male flowers umbellate or subumbellate; peduncle very short, apically 10–20-flowered; pedicels 2–8 mm; calyx tube 3–5 mm, ca. 3 mm in diam.; segments subulate, 0.2–0.4 mm; corolla yellow or yellow-white; segments triangular, 1–1.5 mm, apex obtuse or acute; filaments filiform, ca. 3 mm; anther cells curved or conduplicate, puberulent. Female flowers usually solitary; pedicel 2–10 mm, puberulent; calyx and corolla as in male flowers; ovary ovoid, 2.5–3.5 × 2–3 mm; stigmas 3. Fruit red-brown, broadly ovoid, oblong, or subglobose, 2–6 × 2–5 cm. Seeds gray-white or gray-brown, suborbicular or obovate, 5–7 × 5–6.5 mm, smooth or slightly tuberculate. Fl. May–Aug, fr. Jun–Nov.

Mixed forests, thickets, grasslands, roadsides, mountain slopes; 600–2600 m. Fujian, Guangdong, Guangxi, Guizhou, Jiangxi, Sichuan, Taiwan, Xizang, Yunnan [NE Afghanistan, Bhutan, India, Indonesia (Java), Malaysia, Myanmar, Nepal, Pakistan, Thailand, Vietnam].

The roots are used medicinally.

- 1a. Plants dioecious; leaves polymorphic; anther cells curved 1a. subsp. *heterophylla*

- 1b. Plants monoecious; leaves palmately 5-lobed, segments lanceolate; anther cells conduplicate 1b. subsp. *napaulensis*

1a. *Solena heterophylla* subsp. *heterophylla*

茅瓜(原亚种) mao gua (yuan ya zhong)

Bryonia hastata Loureiro; *Melothria delavayi* Cogniaux; *Solena delavayi* (Cogniaux) C. Y. Wu.

Plants dioecious. Anther cells curved. Fruit oblong or subglobose, 2–6 × 2–5 cm. Fl. May–Aug, fr. Aug–Nov.

Mixed forests, thickets, grasslands, roadsides on mountain slopes; 600–2600 m. Fujian, Guangdong, Guangxi, Guizhou, Jiangxi, Sichuan, Taiwan, Xizang, Yunnan [NE Afghanistan, India, Indonesia (Java), Malaysia, Myanmar, Nepal, Thailand, Vietnam].

The roots are used medicinally.

- 1b. *Solena heterophylla* subsp. *napaulensis* (Seringe) W. J. de Wilde & Duyfjes, Blumea 49: 75. 2004.

西藏茅瓜 xi zang mao gua

Bryonia napaulensis Seringe in Candolle, Prodr. 3: 307. 1828.

Plants monoecious. Anther cells conduplicate. Fruit broadly ovoid, 2.5–3 × ca. 2.5 cm, glabrous, apex and base obtuse. Fl. May–Jun, fr. Jun–Aug.

Mountain slopes, grasslands, thickets; 2000–2300 m. SE Xizang, Yunnan [N India, Myanmar, Nepal].

Fl. China 19: 54. 2011.