

27. MUKIA Arnott, Madras J. Lit. Sci. 12: 50. 1840.

帽儿瓜属 mao er gua shu

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

Herbs, scandent, annual, slender, setose. Petiole very short, subglabrous; leaf blade usually 3–7-lobed, base cordate. Tendrils simple. Plants monoecious; flowers small, male flowers fascicled; female flowers usually solitary or in a few-flowered fascicle in same axil as male flowers. Male flowers: calyx campanulate; segments 5, subulate; corolla rotate; segments 5; stamens 3, free, inserted on calyx tube; filaments short; anthers oblong, two 2-celled, one 1-celled; anther cells erect; connective slightly produced; rudimentary ovary glandular. Female flowers: calyx and corolla as in male flowers; staminodes absent or very small; ovary ovoid, hispid; style terete; stigma 2- or 3-lobed, ovules few, horizontal. Berry oblong or globose, small, indehiscent. Seeds horizontal, ovate, compressed, both surfaces scabrous or smooth, marginate.

Three species: tropical and subtropical Africa, Asia, Australia; two species in China.

Renner et al. (BMC Evol. Biol. 7: 58. 2007; doi:10.1186/1471-2148-7-58) presented molecular evidence to show that *Mukia* is an ingroup of *Cucumis*.

- 1a. Fruit globose, fruit coat thickening; seed surfaces scrobiculate, indistinctly marginate 1. *M. maderaspatana*
1b. Fruit oblong, fruit coat not thickening; seed surfaces indistinctly scrobiculate, marginate 2. *M. javanica*

1. *Mukia maderaspatana* (Linnaeus) M. Roemer, Fam. Nat. Syn. Monogr. 2: 47. 1846.

帽儿瓜 mao er gua

Cucumis maderaspatanus Linnaeus, Sp. Pl. 2: 1012. 1753; *Bryonia althaeoides* Seringe; *B. cordifolia* Linnaeus; *B. scabrella* Linnaeus f.; *Coccinia cordifolia* (Linnaeus) Cogniaux; *Melothria althaeoides* (Seringe) Nakai; *M. maderaspatana* (Linnaeus) Cogniaux; *Mukia althaeoides* (Seringe) M. Roemer; *M. scabrella* (Linnaeus f.) Arnott.

Plants scandent or prostrate, all parts densely yellow-brown hispid. Stems many branched, robust, sulcate. Leaf blade somewhat rigid, ovate or ovate-cordate, 5–9 × 5–9 cm, usually 3–5-lobed, median lobe ovate-triangular, both surfaces scabrous, base cordate, margin irregularly denticulate, apex slightly obtuse. Tendrils moderately robust. Male flowers fascicled; pedicels short or absent; calyx tube campanulate, ca. 2 × 1.5 mm; segments reflexed, subulate, 1–1.5 × ca. 1 mm; corolla yellow; segments ovate-oblong, ca. 2 × 0.5 mm, apex obtuse; filaments short, ca. 0.5 mm, slightly pilose; anthers oblong, ca. 1 mm, ciliate; connective distinct; rudimentary ovary globose. Female flowers solitary or 3–5-fasciculate. Fruiting pedicels extremely short; fruit dark red, globose, ca. 1 cm in diam., smooth. Seeds ovate, ca. 4 × 2.5 mm, ca. 2.5 mm thick, both surfaces scrobiculate, indistinctly marginate. Fl. Apr–Aug, fr. Aug–Dec.

Rocky mountain slopes, thickets; 400–1700 m. Guangdong, Guangxi, Guizhou, Taiwan, Yunnan [tropical Africa and Asia, Australia].

2. *Mukia javanica* (Miquel) C. Jeffrey, Hooker's Icon. Pl. 37: t. 3661. 1969.

爪哇帽儿瓜 zhua wa mao er gua

Karivia javanica Miquel, Fl. Ned. Ind. 1(1): 661. 1856; *Cucumis javanicus* (Miquel) Ghebretinsae & Thulin; *Melothria*

assamica Chakravarty; *M. assamica* var. *scabra* Chakravarty; *M. javanica* (Miquel) Cogniaux.

Plants scandent. Stem and branches slender, hispid. Petiole shortly hispid; leaf blade ovate-cordate, 4–6 × 3–5(–7) cm, usually 3–5-lobed, median lobe ovate-triangular, both surfaces shortly hispid, margin dentate, apex acuminate. Tendrils slender, hispid. Male flowers 2 to several, fasciculate, in leaf axils; pedicel very short, 2–3 mm, shortly hispid; calyx tube cupular, 2–2.5 mm; segments erect, subulate, 1.5–2.5 mm; corolla yellow; segments ovate-oblong, 3–4 mm, apex obtuse; stamens inserted on calyx tube; filaments ca. 0.5 mm, puberulent; anthers 1.5–2 mm; connective produced. Female flowers fasciculate in same axil as male flowers; calyx tube cupular; segments triangular, ca. 0.5 × 0.3 mm; corolla segments ovate-oblong, ca. 2.5 × 1.5 mm, 3-veined; ovary ovoid, 3–4 × 1.5–2.5 mm, densely hispid; style ca. 1 mm, apex 3-lobed; staminodes glandular. Fruiting pedicel 2–4 mm, densely hispid; fruit red, oblong, 1–1.5 × ca. 1 cm. Seeds ovate, ca. 4 × 2.5 mm, margin prominent. Fl. Apr–Jul, fr. Jul–Oct.

Forests, grasslands on mountain slopes; 500–1200 m. Guangdong, Guangxi, Taiwan, Yunnan [India, Indonesia, Philippines, Thailand, Vietnam].

Fl. China 19: 50–51. 2011.