

52. *JATROPHA* Linnaeus, Sp. Pl. 2: 1006. 1753, nom. cons.

麻风树属 ma feng shu shu

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Trees, shrubs, subshrubs, or herbs. Stems with laticifers, latex clear, white, or reddish; indumentum simple, sometimes glandular. Stipules persistent or deciduous, entire or setiform, or a series of stalked glands. Leaves alternate, unlobed or palmately lobed or parted, usually with glands at apex of petiole; venation palmate [or pinnate]. Flowers monoecious or dioecious in paniculate dichasia. Male flowers: sepals 5, imbricate, slightly connate at base; petals 5, imbricate, free, sometimes coherent or connate at base; disk glands 5, free or connate into ring; stamens 8–12, sometimes more, in 2–6 series; filaments at least partly connate, sometimes inner filaments connate into a column; pistillode filamentous or absent. Female flowers: sepals 5(or 6), free, imbricate, usually persistent in fruits; disk annular, lobed, or dissected, sometimes with staminodes; ovary 2- or 3(or 4 or 5)-locular; ovules 1 per locule; styles unlobed or bifid, sometimes dilated. Fruits capsular. Seeds carunculate; episperm crustaceous; endosperm fleshy; cotyledon broad and flat.

About 175 species: most in the tropics and subtropics of America, ca. 70 species in Africa, widely introduced elsewhere; three species (introduced) in China.

- 1a. Stipules scalelike, deciduous; inflorescences axillary, shorter than leaves; petals connate to middle, greenish yellow; leaves unlobed or shortly 3–5-lobed 1. *J. curcas*
1b. Stipules divided into spines or setae, persistent; inflorescences terminal, longer than leaves; petals free or almost so, red; leaves shortly lobed or very deeply divided.
2a. Leaves peltate, entire or shortly 2–6-lobed; stipule lobes spinelike 2. *J. podagrica*
2b. Leaves not peltate, palmately deeply 9–11-lobed, lobes linear-lanceolate; stipule lobes divaricate, setiform 3. *J. multifida*

1. *Jatropha curcas* Linnaeus, Sp. Pl. 2: 1006. 1753.

麻风树 ma feng shu

Manihot curcas (Linnaeus) Crantz.

Shrubs or treelets, 2–5 m tall, with watery latex; bark smooth; branches glaucous-gray, glabrous, sparsely lenticellate, pith larger. Stipules small; petioles 6–18 cm; leaf blade rotund to ovate, 7–18 × 6–16 cm, papery, nitid green and glabrous adaxially, gray-green and along nerves puberulent to glabrous abaxially, base cordate, apex acute; palmate veins 5–7. Inflorescences axillary, 6–10 cm; bracts lanceolate, 4–8 mm. Male flowers: sepals 5, ca. 4 mm, connate at base; petals oblong, green-yellow, ca. 6 mm, connate to middle, hairy inside; disk glands 5, nearly terete; stamens 10; outer 5 filaments free, inner filaments connate in lower part. Female flowers: pedicels elongate; sepals free, ca. 6 mm; petals and disk glands as in male; ovary 3-locular, glabrous; styles bifid at apex. Capsules ellipsoidal or globose, 2.5–3 cm, yellow. Seeds ellipsoidal, 1.5–2 cm, black. Fl. Sep–Oct, fr. Oct–Dec.

Cultivated for medicine. Fujian, Guangdong, Guangxi, Hainan, Sichuan, Taiwan, Yunnan [native to tropical America; widely introduced].

Jatropha curcas seeds are the source of curcas oil, a very powerful purgative, also used for making candles and soap, for lighting, and as a lubricant. There is interest in the oil as a biofuel crop for areas too dry for normal crops. The bark is used as medicine for leprosy (leprosy), itchy skin, eczema, chronic ulcers, etc.

2. *Jatropha podagrica* Hooker in Curtis, Bot. Mag. 74: t. 4376. 1848.

佛肚树 fo du shu

Erect shrubs to 2 m tall, with woody stem swollen at base or lower part; branches stout and short, fleshy, sparsely

lenticellate. Stipules spiniform, persistent leaf scar large and prominent; petiole 8–10 cm, glabrous; leaf blade peltate, rotund to elliptic, 8–18(–25) × 6–16 cm, nitid green adaxially, gray-green abaxially, glabrous on both surfaces, base truncate or obtuse, margin entire or shallowly 2–6-lobed, apex obtuse; palmate veins 6–8. Inflorescences terminal, long pedunculate, branching short, red; calyx ca. 2 mm; sepals rotund, ca. 1 mm; petals obovate-oblong, ca. 6 mm, red; stamens 6–8, connate at base; anthers nearly as long as filaments; ovary glabrous; styles 3, connate at base, bifid at apex. Capsules ellipsoidal, 1.3–1.8 × ca. 1.5 cm, with 3 longitudinal grooves. Seeds ca. 1.1 cm, smooth. Fl. and fr. almost throughout year.

Cultivated for medicine and ornamental purposes. Fujian, Guangdong, Guangxi, Hainan, Yunnan [native to Central America; widely introduced].

All parts are used as medicine for reduction of swelling, for pain relief, and to detoxify snakebites.

3. *Jatropha multifida* Linnaeus, Sp. Pl. 2: 1006. 1753.

珊瑚花 shan hu hua

Shrubs or treelets, 2–3(–6) m tall; stems glabrous. Stipules divided into forked setiform, to 2 cm; petiole 10–25 cm; leaf

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blade orbicular in outline, 10–30 cm wide, green adaxially, gray-green abaxially, glabrous on both surfaces, margin palmately 9–11-lobed, lobes entire; venation pinnate. Inflorescences terminal; peduncle 13–20 cm; pedicels short; flowers dense. Male flowers: calyx 2–3 mm, lobes 5, rotund, glabrous; sepals 5, spatulate, red, ca. 4 mm; stamens 8; filaments connate at base; anthers elongate. Female flowers: calyx as in male; sepals 6–7 mm, red; ovary glabrous; styles 3, connate in lower 1/2. Capsules ellipsoidal to obovate, ca. 3 cm, glabrous. Fl. Jul–Dec, fr. Sep–Feb.

Cultivated for ornamental and medicinal purposes. Guangdong, Guangxi, Hainan, Yunnan [native to tropical and subtropical America].

The bark and leaves are used as medicine for neurodermatitis, itchy skin, and skin eczema.

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