

1. *CARISSA* Linnaeus, Mant. Pl. 1: 52. 1767, nom. cons.

假虎刺属 *jia hu ci shu*

Shrubs, climbers, or small trees, mostly spiny. Branches dichotomous. Leaves opposite; petiole 2–3 mm. Cymes terminal or axillary, dichotomous, pedunculate, usually many flowered. Flowers 5- [or 4]-merous. Calyx without glands or rarely with many basal glands inside. Corolla salverform, tube cylindric, dilated at staminal insertion, lobes overlapping to left or to right. Stamens included in throat; anthers lanceolate, obtuse or apiculate, base not appendaged; disc absent. Ovary 2-loculed; ovules 1–4 in each locule, rarely numerous, biseriate. Style filiform; pistil head narrowly oblong or fusiform, apex shortly 2-cleft. Berries 1- or 2-loculed. Seeds 2 or more, peltate; endosperm fleshy; cotyledons ovate, radicle inferior.

About 30 species: tropics and subtropics of Africa, Asia, and Australia; four species in China.

- 1a. Corolla lobes overlapping to left, as long as or longer than tube 1. *C. macrocarpa*
- 1b. Corolla lobes overlapping to right, shorter than tube.
 - 2a. Lateral veins of leaf blade ca. 8 pairs; corolla puberulent inside; fruit ellipsoid, 1.5–2.5 × 1–2 cm 4. *C. carandas*
 - 2b. Lateral veins of leaf blade 3–5 pairs; corolla glabrous or pubescent inside; fruit globose, 0.5–1.2 cm in diam.
 - 3a. Secondary veins conspicuous on adaxial leaf surface; branches and abaxial leaf surface puberulent 3. *C. spinarum*
 - 3b. Secondary veins of leaf blade inconspicuous; branchlets and leaves glabrous in plants introduced into China 2. *C. edulis*

1. *Carissa macrocarpa* (Ecklon) A. de Candolle, Prodr. 8: 336. 1844.

大花假虎刺 *da hua jia hu ci*

Arduina macrocarpa Ecklon, S. African J. 1: 372. 1830; *A. grandiflora* E. Meyer; *Carissa grandiflora* (E. Meyer) A. de Candolle.

Shrubs or small trees to 5 m tall. Spines 1- or 2-forked, 2–4 cm, strong. Leaf blade broadly ovate, 2.5–7.5 × 2–5 cm, thick leathery, glabrous, base rounded to obtuse, apex mucronate, lateral veins obscure. Cymes terminal, (1–)3-flowered. Pedicel 2–3 mm. Flowers fragrant. Sepals very narrowly ovate, 3–6 mm. Corolla white or pink, tube 1.1–1.8 cm, pubescent inside; lobes oblong, 0.9–2.4 cm, overlapping to left. Ovules numerous. Berries bright red to violet, ovoid, 2–5 cm, ca. 16-seeded. Fl. Aug. $2n = 66$.

S Fujian and S Guangdong [introduced from S Africa].

Cultivated for its edible fruit.

2. *Carissa edulis* (Forsskål) Vahl, Symb. Bot. 1: 22. 1790.

甜假虎刺 *tian jia hu ci*

Antura edulis Forsskål, Fl. Aegypt.-Arab. 63. 1775; *Arduina edulis* (Forsskål) Spreng; *Carandas edulis* (Forsskål) Hiern; *Jasminonerium edule* (Forsskål) Kuntze.

Plants small trees or climbing in the wild, much branched shrubs to 5 m in cultivation; spines usually simple, straight or recurved, 2.5–5 cm. Leaf blade ovate to obovate or suborbicular, 2–5 × 2–4 cm, leathery, glabrous; lateral veins 3–5 pairs, inconspicuous. Sepals very narrowly oblong, 2–4.5 mm, ciliolate, glabrous outside. Corolla white or tinged with pink, glabrous outside, slightly hairy at mouth and on inner lobe surface, tube 0.9–2 cm; lobes ovate or oblong, 3–9

mm, acute at apex, overlapping to right. Berries purple to red, globose, 7–10 mm in diam. Seeds 2–4. $2n = 22$.

S Yunnan [native of tropical Africa and S Arabia].

Cultivated for its edible fruit.

3. *Carissa spinarum* Linnaeus, Mant. Pl. 2: 559. 1771.

假虎刺 *jia hu ci*

Carissa diffusa Roxburgh; *C. yunnanensis* Tsiang & P. T. Li.

Shrubs or small trees to 5 m tall; spines simple or forked, 1.2–6 cm. Leaf blade ovate to elliptic, 0.5–5.5 × 0.3–2.5 cm, leathery, finely puberulent abaxially, base rounded or acute, apex acute or short acuminate; lateral veins 3–5 pairs, conspicuous. Cymes terminal or axillary, 3–7-flowered, finely puberulent. Sepals ca. 2.5 × 1 mm, without glands. Corolla white, tube ca. 1 cm, lobes 5–7 mm, overlapping to right; ovules 1 in each locule. Berries shining black, subglobose, 5–12 mm. Seeds 3–5 mm. Fl. Mar–May, fr. Sep–Dec. $2n = 22$.

Bushes, roadsides, forest edges. Guizhou, Sichuan, Yunnan [India, Myanmar, Sri Lanka, Thailand].

The roots are used to treat hepatitis and rheumatoid arthritis.

4. *Carissa carandas* Linnaeus, Mant. Pl. 1: 52. 1767.

刺黄果 *ci huang guo*

Arduina carandas (Linnaeus) K. Schumann; *Damnacanthus esquirolii* H. Lévillé.

Shrubs, small trees, or climbers to 5 m tall. Spines simple or forked, to 5 cm. Leaf blade broadly ovate to oblong, 3–7 × 1.5–4 cm, base broadly cuneate to rounded, apex short apiculate; lateral veins ca. 8 pairs, ascending,

convergent, anastomosing near margin. Cymes terminal, usually 3-flowered; peduncle 1.5–2.5 cm; bracteoles minute. Flowers fragrant. Pedicel about as long as calyx or slightly longer. Sepals 2.5–7 mm, with many basal glands inside. Corolla white or pale rose; tube to 2 cm, puberulent inside; lobes lanceolate, ca. 1 cm, acute, overlapping to right, puberulent, ciliate. Ovules numerous in each locule. Berries reddish purple, ellipsoid, 1.5–2.5 × 1–2 cm. Fl. Mar-Jun, fr. Jul-Dec. $2n = 22$.

Fujian, Guangdong, Guizhou, Hainan, Taiwan [India, Indonesia, Malaysia, Myanmar, Sri Lanka, Thailand].

Cultivated for its edible fruit, which can be eaten raw, made into jelly, or used for pies.

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