

CARICACEAE

番木瓜科 fan mu gua ke

Wang Yinzheng (王印政)¹; Nicholas J. Turland²

Trees small, palmlike, or shrubs, rarely vines, often prickly, monoecious, dioecious, andromonoecious, gynomonocious, or polygamomonocious. Stem stout, unbranched, rarely branched, with a terminal cluster of leaves, with flowing, latexlike exudate. Leaves alternate, long petiolate, usually estipulate, large; stipules when present, spiny; leaf blade palmate or palmatifid, rarely entire or pinnatifid. Inflorescences axillary; male flowers aggregated in cymose panicles; female flowers usually solitary or aggregated in corymbose cymes, large. Calyx 5-lobed; lobes small, connate basally. Corolla 5-lobed; tube long in male flowers, short in female flowers. Stamens 5 or 10, 1- or 2-whorled, inserted in throat of corolla tube; filaments free, connate basally; anthers introrse, tetrasporangiate, dehiscing via longitudinal slits. Gynoecium in male flowers vestigial, or absent; in female flowers syncarpous, synovarious to synstylovarious; ovary superior, 1- or 5-loculed, placentation when 1-loculed parietal (placentas ± deeply intruded) or laminar-dispersed, when 5-loculed axile; ovules numerous, anatropous, bitegmic; styles 1 or 5, free to partly joined, apical; stigmas 5, papillate, dry. Fruit large, fleshy, indehiscent berry. Seeds numerous, surrounded by mucilage; endosperm oily; embryo well differentiated; cotyledons 2, broad, flat. $n = 9$.

Six genera and 34 species: Central and South America, one genus of two species (*Cylicomorpha* Urban) in tropical Africa, one genus (*Carica*) widely introduced and cultivated in tropical areas of the world, including China.

Chen Peishan. 1999. Caricaceae. *In*: Ku Tsuechih, ed., *Fl. Reipubl. Popularis Sin.* 52(1): 121–122.

1. CARICA Linnaeus, Sp. Pl. 2: 1036. 1753.

番木瓜属 fan mu gua shu

Papaya Miller.

Trees small, or shrubs. Leaves subpeltate; leaf blade palmatifid, rarely entire. Flowers unisexual or bisexual. Male flowers: corolla lobes oblong or linear, valvate or contorted; stamens 10, filaments short; sterile ovary subulate. Female flowers: corolla lobes linear-oblong; stamens absent; ovary estipitate, 1-loculed; ovules several to numerous, placentation parietal; stigmas 5, inflated or linear. Fruit large, succulent. Seeds numerous, ovoid or slightly compressed, arillate; embryo compressed; cotyledons long elliptic.

One species: of cultivated origin in Central America, unknown in the wild; widely introduced and cultivated in tropical areas of the world, including China.

1. *Carica papaya* Linnaeus, Sp. Pl. 2: 1036. 1753.

番木瓜 fan mu gua

Papaya carica Gaertner.

Trees or shrubs 8–10 m tall. Stem simple, with stipulate scars helically arranged. Petiole hollow, 60–100 cm; leaf blade ca. 60 cm, usually 5–9 palmatifid; lobes pinnatifid. Male inflorescence pendulous, to 1 m. Male flowers: pedicel absent; corolla tube creamy yellow, 1.6–2.5 cm, lobes lanceolate, ca. 1.8 × 0.45 cm; stamens 5 longer and 5 shorter, shorter ones almost without filaments; filaments white, white tomentose. Female flowers usually solitary or aggregated in corymbose cymes;

pedicel short or nearly absent; calyx lobes ca. 1 cm; corolla lobes creamy yellow, oblong or lanceolate, 5–6.2 × 1.2–2 cm; ovary ovoid; stigmas partite, nearly fimbriate. Bisexual flowers: corolla tube 1.9–2.5 cm, lobes oblong, ca. 2.8 × 0.9 cm; stamens 5 or 10 in 1 or 2 whorls; ovary smaller than in female flowers. Fruit orange-yellow or yellow at maturity, cylindrical, ovoid-cylindrical, or subglobose, 10–30 cm; sarcocarp soft with a mild, pleasant flavor. Seeds numerous, black at maturity, ovoid. $2n = 18$.

Cultivated. S China [of cultivated origin in Central America; widely introduced and cultivated in tropical areas of the world].

The large, succulent, delicious fruits (papaya) are eaten.

¹ Institute of Botany, Chinese Academy of Sciences, 20 Nanxincun, Xiangshan, Beijing 100093, People's Republic of China.

² Missouri Botanical Garden, P.O. Box 299, Saint Louis, Missouri 63166–0299, U.S.A.