# 73. HURA Linnaeus, Sp. Pl. 2: 1008. 1753.

# 响盒子属 xiang he zi shu

### Li Bingtao (李秉滔 Li Ping-tao); Hans-Joachim Esser

Trees, branching usually in whorls; trunk and branches spiny; indumentum of simple, multicellular hairs; white latex present. Leaves alternate; stipules large, caducous; petioles 2-glandular at apex; leaf blade subentire or undulate-serrulate, pinnately veined. Plants monoecious. Inflorescences terminal or axillary, unbranched, elongate. Male flowers in terminal, long pedunculate catkin; bracts not glandular, united into membranous sheath around bud, afterward irregularly lobed; calyx membranous, shallowly cup-shaped, truncate or slightly serrulate; petals absent; disk absent; stamens (8–)10–20, several-seriate; filaments and connectives united into a stout column, theca free, extrorse, longitudinally dehiscent; pistillode absent. Female flowers solitary, axillary; pedicel long; calyx leathery, broadly cup-shaped, truncate at apex; petals absent; disk absent; ovary 5–20-celled; ovules 1 per locule; styles fused into prominent, fleshy column; stigmas united into large umbrella-shaped lobed disk. Fruit a large, oblate schizocarp, depressed at apex, breaking up into laterally compressed woody mericarps. Seeds laterally compressed, smooth; caruncle absent; endosperm fleshy; cotyledon rounded and flattened.

Two or three species: tropical America, also widely cultivated; one species (introduced) in China.

#### 1. Hura crepitans Linnaeus, Sp. Pl. 2: 1008. 1753.

# 响盒子 xiang he zi

Trees up to 40 m tall in wild; stem and main branches densely spiny; indumentum vellowish brown; branches densely lenticellate, glabrous. Stipules lanceolate or ovatelanceolate.  $10-15 \times 2-3$  mm, pubescent, caducous; petiole 4– 20 cm, apex with 2 glands; leaf blade broadly ovate,  $5-29 \times 5-$ 17 cm, papery, abaxially pilose along midrib, adaxially glabrous, base cordate, margins  $\pm$  shallowly dentate-serrate, apex caudate-acuminate, mucronulate; midrib elevated on both surfaces, lateral veins 10-13(-16) on each side. Male inflorescence flowers: ovoidconical,  $(1.6-)4-5 \times (0.8-)1.5-2$  cm, mostly dark red; peduncles (1.2-)7-10 cm, often with solitary female flower at base; pedicel ca. 2 mm; calyx tube 2-3 mm; stamen connectives and filaments connate into column, 4–12 mm, longest at base of catkin; anthers in (1 or)2 or 3 whorls. Female flowers: pedicel 10–17 mm, after anthesis up to 6 cm; calyx tube truncate, 4–6(–8) mm, enclosing ovary; style column 2–5 cm; stigmatic disk dark purple, 1.5–2.5 cm in diam., with 11–14 obtuse lobes, spreading radially. Fruiting pedicel pendent, to 6 cm; fruit oblate,  $3–5 \times 8–9$  cm in diam., becoming reddish brown, concave at apex and base, longitudinally grooved. Seed ca. 2 cm in diam. Fl. May, fr. Aug.

Cultivated. Hainan, Hong Kong [native to tropical America, widely grown elsewhere].

This species is cultivated for medicine and as an ornamental. The latex is extremely toxic. The distinctive fruit was once used for holding fine dry sand used for blotting ink before the introduction of blotting paper, hence the common name "sand box tree." The distinctive dolphinshaped mericarps are sometimes used in necklaces. Fl. China 11: 287-288. 2008.