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31. GUETTARDA Linnaeus, Sp. Pl. 2: 991. 1753.

海岸桐属 hai an tong shu

Chen Tao (陈涛); Charlotte M. Taylor

Shrubs or trees, sometimes polygamo-dioecious, unarmed. Raphides absent. Leaves opposite or rarely ternate, decussate, usually with domatia; tertiary and/or quaternary venation often arranged in regular, often small rectangles or squares; stipules caducous, interpetiolar, generally triangular. Inflorescences axillary, cymose with axes often markedly dichotomous or scorpioid, several to many flowered, pedunculate with peduncle usually elongated [to sessile], bracts reduced [to well developed]. Flowers sessile to shortly pedicellate, unisexual or bisexual and monomorphic or at least sometimes distylous, sweetly fragrant. Calyx limb tubular or subcampanulate, truncate or irregularly denticulate. Corolla white or pink, salverform with tube infrequently curved, glabrous to variously pubescent inside; lobes 4–9, obtuse, imbricate (and quincuncial) in bud. Stamens 4–9, inserted in corolla tube, included; filaments short or reduced; anthers dorsifixed. Ovary 4–9-celled, ovules 1 in each cell, pendulous from apical placentas, anatropous, with funicle thickened; stigma capitate, included. Fruit red, purple, black, or rarely green, drupaceous, thinly fleshy, oblate (i.e., depressed globose), ellipsoid, or subglobose, with calyx limb persistent; pyrene 1, 4–9-celled with 1 seed in each cell, oblate, ellipsoid, or subglobose, often 4–9-angled or -grooved, with preformed germination pore at apex of each cell; seeds medium-sized, ellipsoid, straight or curved; testa membranous; endosperm absent or scanty; embryo cylindrical or compressed; cotyledons small; radicle ascending.

About 60–80 species: tropical forests, most in tropical America and Pacific region, one species widespread on coasts of Indian Ocean and E Pacific Ocean; one species in China.

1. Guettarda speciosa Linnaeus, Sp. Pl. 2: 991. 1753.

海岸桐 hai an tong

Small trees, 3–8 m tall; bark becoming black, smooth or often lenticellate; branchlets rather stout, densely strigillose to velutinous-tomentulose usually becoming glabrescent. Petiole stout, 1.5–5 cm, densely strigillose or velutinous; leaf blade drying thinly to stiffly papery, broadly obovate or broadly elliptic, 11–20 × 8–18 cm, adaxially glabrescent, usually shiny, and often rugulose, abaxially densely tomentulose or strigillose to glabrescent, base obtuse, rounded, subcordate, or shortly cordate, apex obtuse or rounded sometimes with a short tip 3–5 mm; secondary veins 7–11 pairs, weakly but regularly looping to connect; stipules ovate or lanceolate, 6–11 mm, moderately to densely strigillose to strigose sometimes becoming glabrescent, obtuse to rounded. Inflorescences produced in with or often below leaves, subcapitate to congested-cymose, densely velutinous-tomentulose; peduncles 3–12 cm; branched portion 1.5–3 × 2–3.5 cm, axes scorpioid; bracts ovate, 5–7 mm, caducous. Flowers sessile. Calyx densely velutinous-tomentulose to strigillose; ovary portion obconic to cupulate, 2–2.5 mm; limb tubular, 2–3.5 mm, truncate. Corolla white, outside densely velutinous-tomentulose to strigillose; tube 2.5–3 cm, inside glabrous except sericeous in throat; lobes 7 or 8, obovate, 8–10 mm, obtuse to rounded. Drupes apparently green at maturity, oblate, 2–3 cm in diam., sparsely strigillose or tomentulose to eventually glabrescent; pyrene included in fibrous mesocarp. Fl. Apr–Jul.

Thickets on sandy and limestone coasts; sea level to near sea level. Guangdong, Hainan, Taiwan [Borneo, India, Indonesia, Japan, Malaysia, Philippines, Singapore, Sri Lanka, Thailand; coastal E Africa, Australia, Madagascar, Pacific islands].

The flowers are nocturnal and open for only one night (Puff et al., Rubiaceae of Thailand, 130. 2005). The fruit of this species float and are dispersed by water, and apparently they are green when mature. This species is known to be distylous in Polynesia and E Africa (Bridson & Verdcourt, Fl. Trop. E. Africa, Rub. (Pt. 2), 416. 1988).

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