

2. DACRYCARPUS (Endlicher) de Laubenfels, J. Arnold Arbor. 50: 315. 1969.

鸡毛松属 ji mao song shu

Podocarpus L'Héritier ex Persoon sect. *Dacrycarpus* Endlicher, Syn. Conif. 221. 1847; *Bracteocarpus* A. V. Bobrov & Melikyan.

Trees or shrubs evergreen, dioecious (very rarely monoecious); trunk straight; main branches spreading or drooping; branchlets drooping or ascending, dense. Leaves dimorphic: juvenile leaves 2-ranked and forming an oblong-ovate branchlet outline, linear, not scalelike; adult leaves needlelike or scalelike, falcate, bilaterally or bifacially flattened, or not flattened, 0.8–1.5 mm. Pollen cones lateral (rarely terminal), solitary or few together; microsporophylls numerous, imbricate; microsporangia 2, abaxial. Seed-bearing structures terminal and often borne on short, lateral branchlets, pedunculate, with appressed or spreading, bractlike leaves at base of peduncle; apical 1 or 2 bracts fertile; basal bracts fused to form a succulent, warty receptacle; ovule inverted. Epimatium wholly enveloping seed, united with fertile bract(s) and together bearing a short, free apex forming an asymmetrically projecting crest on immature seed-bearing structure. Seed large.

Nine species: from China and Myanmar to Fiji Islands and New Zealand; one species in China.

1. *Dacrycarpus imbricatus* (Blume) de Laubenfels var. **patulus** de Laubenfels, J. Arnold Arbor. 50: 320. 1969.

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Bracteocarpus kawaii (Hayata) A. V. Bobrov & Melikyan; *Podocarpus kawaii* Hayata.

Trees to 40 m tall; trunk to 2 m d.b.h.; bark superficially dark brown or blackish, weathering gray, red-brown and granular fibrous within, flaking in thin strips; crown spreading; branchlets stiff, erect. Juvenile leaves borne at 60–75° to branchlet axis, 0.2–0.7 mm apart (branchlets 3–4 × 1.2–1.6 cm in outline), sessile, green or ± glaucous, linear, falcate to “S”-shaped, 6–10(–17) × 0.9–1.2 mm, stomata arranged in 2 whitish rows on abaxial surface, base decurrent, margin entire, apex obliquely incurved-apiculate, apiculus 0.2–0.3 mm. Adult leaves spreading, needlelike, falcate, 0.1–1.5 × 0.4–0.6 mm, base keeled, apex acute. Pollen cones ovoid or ellipsoid and ca. 5 mm before shedding pollen, finally cylindrical and 6–12 × 2–2.5 mm; microsporophylls 2–4 mm, apex triangular, acute or apiculate. Seed-bearing structures solitary or paired, usually only 1 maturing; bractlike leaves at base of peduncle 1–3 mm. Receptacle glaucous, red when ripe, obovoid, 3–4 × 1–2.5 mm. Epimatium initially green with bluish tinge, red when ripe. Seed globose or subglobose, 5–6 × 4–6 mm. Pollination Feb–Apr, seed maturity Oct–Dec.

Montane rainforests (Hainan), mixed evergreen broad-leaved forests (mainland), or in pure stands, in valleys of mountain streams on slightly acid, montane yellow-earth; 400–1500 m. NE Guangxi (Jinxu Yaozu Zizhixian), Hainan, S Yunnan; cultivated in Guangdong [S Cambodia, Indonesia, Laos, Malaysia, N Myanmar, Papua New Guinea, Philippines, Thailand, Vietnam; Pacific Islands].

A vulnerable plant in China and one of the most important forest trees in Hainan. The varieties recognized by de Laubenfels are distinguishable only by characters of adult leaves; much material in herbaria is juvenile and so identifiable only to species rank. Chinese plants were treated in FRPS as *Podocarpus imbricatus* Blume.

