

Inflorescences infrafoliar; peduncle dorsoventrally compressed, shorter than the rachis; prophyll completely encircling the peduncle at insertion and enclosing the peduncular bract, both caducous; rachis bearing rachillae except adaxially toward the base where nude; rachillae all undivided, bearing flowers in triads of 2 staminate and a pistillate in the lower $\frac{1}{2}$ – $\frac{4}{5}$, with paired or solitary staminate distally rameal bracts low and rounded or with acute center to prominent and acute, bracts subtending the triads low, rounded or with acute center, bracteoles surrounding the pistillate flower low, flattened, not sepal-like.

Staminate flowers sessile or briefly pedicellate, asymmetrical, larger than pistillate at anthesis; sepals 3, slightly imbricate at base only, acute, keeled and somewhat gibbous toward the base; petals 3, valvate, ovate, acute, much longer than sepals; stamens 6, filaments stout, inflexed at the apex in bud, anthers dorsifixed near the middle, linear-lanceolate, briefly bifid at apex, more deeply bifid at base, the locules in bud separated by a very narrow sterile region, laterally dehiscent by longitudinal slits; pistillode nearly as long as stamens, tapered to a slender tip from a broad base: pistillate flowers ovoid; sepals 3, imbricate, broadly rounded; petals 3, broadly imbricate except the briefly valvate apex; staminodes 3, small, triangular, at one side of the gynoeceum; gynoeceum ovoid, unilocular, uniovulate, stigmas scarcely differentiated, not exerted or recurved; ovule attached laterally in upper part of locule, hemianatropous, with large tanniferous chalazal projection.

Fruit ovoid or ovoid-ellipsoid, with stigmatic residue apical; epicarp smooth when fresh, wrinkled but not pebbled when dry; mesocarp of an external and an internal layer of elongate, vertically oriented parenchyma cells with some flat, thin, longitudinal fibers between the layers, cells of the lower layer longer and overlying a layer of contiguous thickened fibers and a thin layer of more or less isodiametric tannin cells adherent to the endocarp; endocarp corneous, fragile, with round basal operculum and scar of seed attachment the length of the adaxial side to the acute apex: seed ovoid-ellipsoid, acute, with elongate hilum and only slightly anastomosed raphe branches descending from the apex; endosperm deeply ruminant; embryo basal.

Distribution: one variable species endemic to Mascarene Islands.

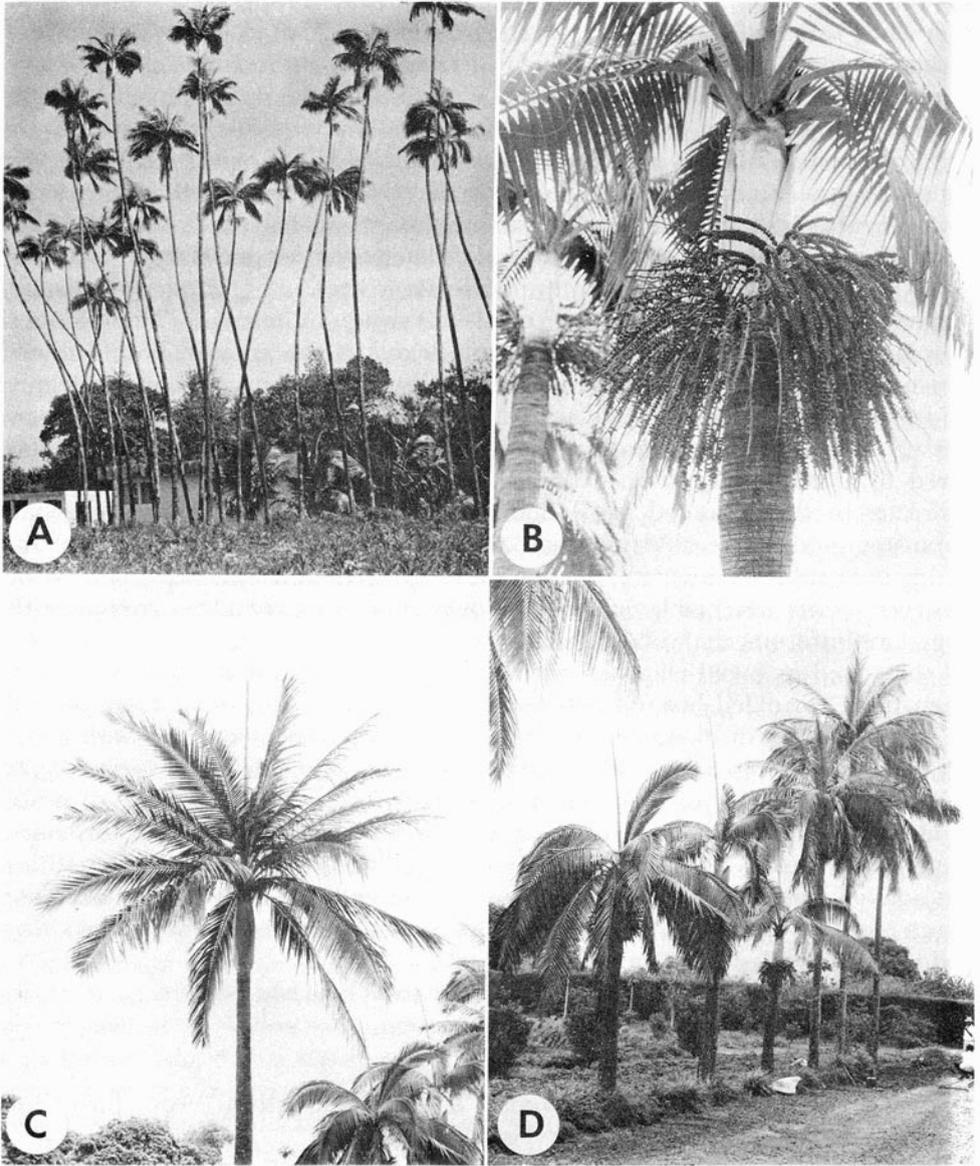
Cytology: $n = 16$ (Read 1966).

Dictyosperma album (Bory) H. Wendl. & Drude ex Scheff., Ann. Jard. Bot. Buitenzorg 1: 157. 1876 ('alba'). (Figs. 6, 7.)

Trunk to ca. 20 m high or more, 8 cm in diam. or enlarged at base and to 14 cm in diam., brown or gray, often vertically fissured.

Leaves 10–20, spreading, with arcuately subpendulous pinnae; sheaths thinly to densely gray-, white-, or brown-tomentose, 0.7–1.1 m long; petiole lepidote-tomentose marginally and above to glabrescent or punctulate, the scales with blackish centers and pale, lacerate-twisted margins; rachis with scales like the petiole, 2–2.5 m long; pinnae 53–70 on each side, the basal pinnae 24–36 cm long, 5–10 mm wide, median pinnae 60–75 cm long, 3.1–4.7 cm wide, apical pinnae 18–29 cm long, 0.8–1.2 cm wide.

Inflorescences as many as 6 below the crownshaft, 0.4–1 m long in bud; peduncle gray-brown lepidote-tomentose, 4–7 cm long, 2.5–5 cm wide, 1.5–2.5



6. *Dictyosperma album*. **A**, individuals of var. *album* planted along approach to a home on Réunion; **B**, crown and inflorescences of var. *conjugatum* cultivated at Barkly Experiment Station (Moore & Guého 10101); **C**, crown of var. *album* at Barkly Experiment Station (Moore & Guého 10102); **D**, three plants of var. *conjugatum* at left (Moore & Guého 10101) and three of var. *aureum* at right (Moore & Guého 10100), Barkly Experiment Station.

cm thick; prophyll glabrous, 0.5–1 m long; rachis more or less densely vestite with twisted brown hairs to glabrescent, 16–27.5 cm long; rachillae 28–43, glabrous or with hairs only at the base, 18–75 cm long; rameal bracts to 4 cm long.

Staminate flowers yellow to maroon, 5–8 mm long; sepals 2–3 mm high; petals 4–7 mm long, 3–4 mm wide; pistillate flowers ca. 6 mm long, 5 mm in diam.; sepals ca. 3 mm high, 4 mm wide; petals 5 mm high, 3–4 mm across.

2. Petiole and leaf rachis with a yellowish or orange-yellow central stripe beneath; median pinnae without prominent veins between midrib and thickened margins, the midrib yellow above; rammenta few or none, scarcely tomentose when present. Rodrigues ---- Var. *aureum*
1. Staminate buds red to maroon or blackish, ca. 8 mm long; leaves with pinnae more or less united distally by long-persistent reins; trunk usually short and stout; rammenta prominent, floccose-tomentose. Round Island ----- Var. *conjugatum*

Var. **album** (Figs. 6A, C).

Areca alba Bory, Voyage 1: 306. 1804. Type: not located. Neotype: Moore & Cadet 10499 (BH).

Linoma alba (Bory) O. F. Cook, J. Washington Acad. Sci. 7: 123. 1917.

?*Dictyosperma furfuraceum* Hort. ex Balf. f. in Baker, Flora of Mauritius and the Seychelles 384. 1877 in *synon.*; Nichols; Illustrated Dictionary of Gardening 1: 470. 1884. Type: not indicated.

?*Dictyosperma album* var. *furfuraceum* L. H. Bailey, Hortus 215. 1930. Type: not indicated.

Dictyosperma rubrum Hort. ex Balf. f. in Baker, Flora of Mauritius and the Seychelles 384. 1877 in *synon.*; Nichols., Illustrated Dictionary of Gardening 1: 470. 1884. Type: not indicated.

Dictosperma album var. *rubrum* L. H. Bailey, Hortus 215. 1930. Type: not indicated.

Trunk to 20 m high. Leaf sheaths whitish- or brownish-tomentose or floccose-tomentose; petiole glabrous or lepidote-tomentose on one or both surfaces; pinnae separate at maturity, with green midrib and 1–2 prominent intermediate veins on each side, margins not markedly thickened, rammenta usually prominent and tomentose on midrib toward base beneath. Staminate buds yellow, 5–8 mm long.

Distribution: Mauritius and Réunion, usually at low elevations, but to 600 m or more.

Specimens examined: MASCARENE ISLANDS. MAURITIUS: cultivated at Barkly Experiment Station, Beau Bassin, as *D. album* var. *rubrum*, 31 Oct 1972, Moore & Guého 10102 (BH, MAU); Crown Land Florin, 16 Nov 1972, Moore & Guého 10113 (BH, MAU); cultivated at Royal Botanic Gardens, Pamplemousses, 7 Apr 1934, Vaughan 987, 988, 990 (BH); cultivated at Curepipe Botanic Gardens, 1,080 ft, 13 Feb 1933, Vaughan 810 (BH). RÉUNION: cultivated, Vincendo, between St. Joseph and St. Pierre, 22 Apr 1971, Moore, Cadet, & Guého 9935 (BH, MAU); planted at junction of routes, Grand Tampon, ca. 600 m, 7 Nov 1972, Moore, Bosser, Friedmann, & Guého 10108 (BH, MAU); cultivated in plantation of Service des Eaux et Forêts, Ste. Rose, 8 Nov 1972, Moore, Bosser, Friedmann, & Guého 10110 (BH, MAU); cultivated in garden of M. Chatel, Terre Rouge, from seed collected on Massif du Cratère, 4 Jan 1979, Moore & Cadet 10499 (BH, neotype; K, MAU, P, REU, isoneotypes).

Var. **aureum** Balf. f. in Baker, Flora of Mauritius and the Seychelles 384. 1877 (*'aurea'*); Philos. Trans. 168: 376, 1879 (Fig. 6D). Type: *Balfour s. n.* (K).

Areca aurea Hort. ex Balf. f., *l. c.*, in *synon.*

Dictyosperma aureum (Balf. f.) Nichols., Illustrated Dictionary of Gardening 1: 470. 1884.

Dictyosperma furfuraceum var. *aureum* (Balf. f.) Becc., Nuov. Giorn. Bot. Ital. 42: 42. 1935, in *synon.*

Trunk to 10 m high or more. Leaf sheaths cinereous, yellowish within; petiole

glabrous, yellowish or orange-yellow above, with a central yellowish or orange-yellow stripe beneath extending onto the rachis; pinnae separate at maturity, with yellow midrib and thickened margins, lacking prominent intermediate veins, ramenta lacking or few on midrib toward base beneath, slender, twisted, and scarcely tomentose when present. Staminate buds yellow, ca. 5 mm long.

Distribution: Rodrigues.

Specimens examined: MASCARENE ISLANDS. RODRIGUES: Transit of Venus Expedition, *Balfour s. n.* (K, type; BM, isotype); without data, *Horne 40* (K); without locality, Jun 1934, *Jauffret 978* (BH); left standing in farmyard, Latanier, near Mount Lubin, ca. 280 m, 21 Nov 1972, *Moore, Bosser, Guého, & Julien 10114* (BH, MAU). MAURITIUS: cultivated at Barkly Experiment Station, Beau Bassin, from seed said to have been imported directly from Rodrigues, 27 Apr 1971, *Moore & Guého 9939* (BH, MAU), 31 Oct 1972, *Moore & Guého 10100* (BH, MAU).

Var. **conjugatum** H. E. Moore & Guého, **var. nov.** (Figs. 6B, D).

Ab var. *albo et aureo* differt in petalis florum masculorum rubris vel nigrescentibus, pinnis per loras conjugatis.

Type: *Moore & Guého 10101* (BH).

Trunk to ca. 5 m high, generally short and stout. Leaf sheaths whitish- or brownish-tomentose; petiole usually tomentose on one or both surfaces; pinnae connected distally by persistent reins, with green midrib and 1-2 prominent intermediate veins on each side, ramenta prominent and tomentose on midrib toward base beneath. Staminate buds red to maroon or blackish, ca. 8 mm long.

Distribution: Round Island.

Specimens examined: MASCARENE ISLANDS. MAURITIUS: cultivated at Barkly Experiment Station, Beau Bassin, from seed said to have come originally from Round Island, 27 Apr 1971, *Moore & Guého 9940* (BH, MAU); 31 Oct 1972, *Moore & Guého 10101* (BH, type; MAU, isotype); cultivated at Botanic Gardens, Curepipe, 1,800 ft, 13 Feb 1933, *Vaughan 810* (BH).

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