

either side, elevated and sharp on upper surface, rounded below, minor nerves of at least 3 orders irregularly developed in intervals, conspicuous dark brown narrow tightly twisted basifixed scales 3-7 mm. long scattered on median and secondary nerves on lower surface near base, marginal nerves brown punctulate: panicle diffuse, glabrous, about 60-80 cm. long; bracts inserted about 1-2 cm. above base and about 1-2 cm. apart, outer bract up to 30 cm. long, lanceolate, inner about 40 cm. long, about 5.5 cm. wide at widest part, acumen about 4 cm. long, 7 mm. wide; peduncle 1.8-2.5 cm. wide, somewhat compressed, rounded at edges, primary branches 7-12 mm. at widest part, ultimate rachillæ 1.5-2 mm. thick, slightly flexuous toward tips, internodes 1.5-2 cm. long ultimate ones shorter: flowers white, staminate about 1 cm. long 0.5 mm. wide in mature bud, apex obtuse, calyx 3 mm. long, petals 9 mm. long, 3.5-4.5 mm. wide, stamens between 110 and 120, filaments 2-3.5 mm. long, anthers 3-3.5 mm. long, shrinking and curving on dehiscence, pistillode 3 mm. long; pistillate flowers in bud 6 mm. high, sepals 3 mm.: fruit red when ripe, fusiform, 3.6-4.4 cm. long including basal cupule, 1.6-1.7 cm. thick at widest part, crowned by the ovoid indurate style, 2-3 mm. high.

Caroline Islands. Ponape: slopes above Nanipil toward Tolun Nanket mountain, drainage of Townjokola River, Not Distr. 250 m., August 13, 1946, *Fosberg 26466* (US, BH, BISH); Mt. Tolenkup, 400 ft., July 14, 1949, *Glassman 2528* (US, 2 sheets); Nut, January 18, 1937, *Kanehira 3924* (FU); s.l. January 1915, *Koidzumi* (TI, 3 sheets). Kusaie: north ridge of Mt. Matanta (Buache), above Tafonshak Village, August 20, 1946, *Fosberg 26608* (BH, BISH, US); near Maarem 300 m., August 10, 1939, *Hatusima 11, 162* (FU); s.l. 500 m., July 1931, *Kanehira 1361* (FU, 2 sheets, US, 2 sheets); Finkol, July 19, 1938, *Hosokawa 9342* (A, US); Hinkolu, March 16, 1937, *Kanehira 4180* (FU). [The type, *Ledermann 13397* was not seen, nor was that of *P. kusaiensis*, *Takamatsu 341*.]

Burret's distinction between *P. Ledermanniana* and *P. kusaiensis* based on thickness of rachillæ and shape of bracts subtending branches of the panicle is not valid when a series of specimens is examined.

A rain forest tree, mostly in second story, commonest at relatively low elevations, at least in Ponape, but reaching 600 m. in Kusaie near top of Mt. Matanta, where the crown is emergent from the low scrub-forest. Found only on volcanic soils.

Native name "Kattai" on Ponape according to Glassman and Kanehira, "Kuter" according to Kanehira. The young bud is said by Glassman to be not tender enough for eating.

† *Ptychosperma palauensis*, (Kanehira) comb. nov.

Ponapea palauensis, Kanehira, in Journ. Dept. Agr. Kyushu Imp. Univ. iv, 432 (1935), *nomen nudum*, and in Journ. Jap. Bot. xii, 732 (1936).

Tree with leaves about 2 m. long, rachis slender, very sparsely and minutely lepidote with dark brown scales, pinnæ tending to be in pairs but not quite opposite, pairs up to 10 cm. apart, apical about 17 cm. long, 3 cm. wide, oblong-ob lanceolate, irregularly truncate, slightly oblique, median 44-62 [or 70] cm. long, 5.5-7 cm. wide with sparse minute brown lepidiæ on upper surface near base, midnerve and marginal nerves prominent, 1 secondary nerve on each side, 3-4 orders of minor veins, the finest numerous and not quite regularly spaced, these bearing numerous minute brown round peltate lepidiæ: inflorescence twice branched, loose, bracts unavailable, scar of first bract 13 or more mm. from base, second 53 or more mm., peduncle and larger branches sparsely dark brown lepidote, rachillæ tapering from 2.5 to 1 mm. thick, somewhat flexuous internodes 12-6 mm. long, shortened distally, bearing flowers in triads to within last three to six nodes, distal ones with pairs of staminate flowers: staminate flowers 8-9 mm. long, sepals 2.5 mm. long, petals 7-7.5 mm. long, 3 mm. wide, oblong, stamens about 60, filaments variable 2-2.5 mm., anthers linear 3-3.5 mm. long, curving somewhat distally when dry, pistillode long-attenuate, subulate, from a thickened base, 5 mm. long, apex very fine; pistillate flowers broadly ovoid in bud, 4 mm. wide, 3 mm. high, sepals and petals 3 mm. high, but quite immature, pistil narrowly ovoid but very immature: fruit not quite mature, ovoid, 22-23 mm. long, 11-17 mm. wide, capped by indurate ovoid-conic style 1.5 mm. high, 2-2.5 mm. wide, calyx in fruit 3.5 mm. long, corolla 6-8 mm. high, indurate, forming a shallow cupule.

Caroline Islands: Palau Group; Korrör Island, Arumizu, September 1933, *S. Nisida 3273* (FU, type); Auluptagel Island, December 1952, *Gressitt 44* (BH, US).

This species is endemic to Palau, and almost nothing is known about it. It apparently inhabits limestone, which is exceptional for section *Ponapea*.

The elongate pistillode of this species serves to break down the distinction between *Ponapea* and *Ptychosperma* and the fruit size is intermediate also.

COCOS, L. Sp. Pl. Ed. 1, 1188 (1753) and Gen. Pl. Ed. 5, 495 (1754).

A monotypic genus with characters of the species.

Cocos nucifera, L. Sp. Pl. Ed. 1, 1188 (1753); Cham. Remarks and Opinions, 146, 151, 152 (1821); Beechey, Voy. Pac. Ber. Str. 517 (1831); Doane, in Amer. Journ. Sci. lxxxi, 322 (1861); Kubary, Ethn. Beitr. Kenntn. Karol. Arch. 101-102 (1895); Engler, in Notizbl. Bot. Gart. Berlin, i, 223-224 (1897); Volkens, in Engler Bot. Jahrb. xxxi, 459 (1901); Safford, in Contr. U. S. Nat. Herb. ix, 233-243, pl. XLIII, XLIV (1905); Hattori, in Journ. Coll. Sci. Imp. Univ. Tokyo, xxvii (10), 45 (1908); Prowazek, Deut. Marianens, 114 (1913); Merr. in Phil. Journ. Sci. Bot. ix, 63 (1914); Koidzumi, in Bot. Mag. Tokyo, xxix, 247 (1915); Wils. in Jour.