

Parari, forêt galerie sur schistes, alt. 20 m, 25 July 1974, *H. S. MacKee 29012* (BH, P); Col d'Amos, gallery forest beside stream in *Melaleuca* savanna, alt. ca. 300 m, 8 Apr. 1964, *H. E. Moore, Jr., R. Barrets, L. Chevalier, & L. Lavoix 9323* (BH, NOU, P); forêt du Sud, Col d'Amos, 20 Sept. 1965, *L. Lavoix 26* (BH); Col d'Amos, versant d'Amos, forêt galerie sur schistes, alt. 300 m, 2 Mar. 1972, *H. S. MacKee 25091* (BH, NOU, P); en bordure d'une rivière, sur les berges rocheuses (micaschistes ou glaucophanites), forêt occupant les parties basses des pentes entre 300 et 500 m au nord du Col d'Amos, 16 Sept. 1966, *M. Schmid 1609* (BH, NOU); Haute Mayavetch, restes de forêt humide sur terrain schisteux, alt. 500 m, 2 Mar. 1972, *H. S. MacKee 25081* (BH, NOU, P), 11 Aug. 1972, *H. S. MacKee 25685* (BH, P).

*Cyphophoenix elegans* is a component of gallery forest in a limited area of northeastern New Caledonia, where it occurs on schistose rocks in marked contrast to the substrate on which *C. nucele* grows. At Col d'Amos, it is the only palm evident (Fig. 3), but in the Haute Mayavetch it occurs with a larger, more abundant, and as yet undescribed palm.

## 2. *Cyphophoenix nucele* H. E. Moore, sp. nov. (Fig. 7, 9)

*Microkentia* sp., Däniker, Vierteljahrsschr. Naturf. Ges. Zürich 77, Beibl. 19: 88. 1932.

Ab *C. elegante* differt in pinnis foliorum utrinque ca. 40 ramis inflorescentiarum duplo (vel triplo) ramosis sepalis florum staminatorum viridibus ramis raphium valde anastamosantibus.

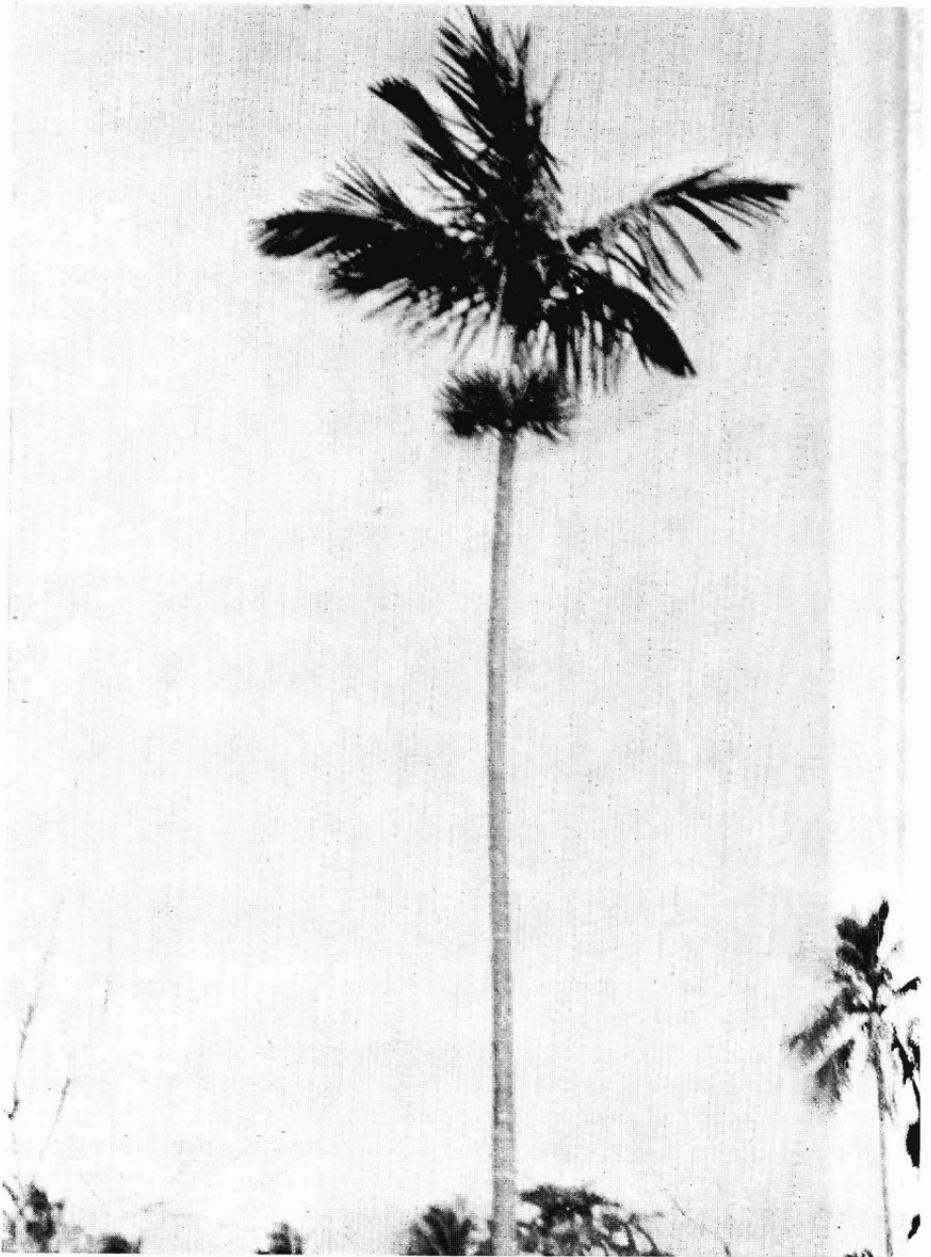
Holotype: *MacKee 28200* (BH).

Trunk to 12 m high, 20 cm in diam., a little enlarged at the base, yellow-green.

Leaves about 8; sheath light green, pale-floccose internally except at base, densely pale floccose-lepidote externally, ca. 55–60 cm long; petiole short, ca. 7 cm long, glabrous above, white-floccose becoming brown-lepidote or -punctulate beneath; rachis glossy and minutely brown-punctulate above, brown-lepidote to -punctulate beneath at maturity, probably white-floccose when young; pinnae about 40 on each side, dark green and glossy above, light green, glossy, and minutely lepidote with more or less deciduous, brown-centered, pale scales beneath, ramenta dull brown, 3–10 mm long, lowest pinnae often close together and continued in a lora, slender, to ca. 50 cm long, 2.5–8 mm wide, median pinnae ca. 78 cm long, 3.6 cm wide, apical pinnae ca. 41 cm long, 3 cm wide.

Inflorescence ca. 50–62 cm long, to 90 cm wide; peduncle short, 5–7 cm long, 4.5–5 cm wide at insertion of prophyll, the base densely covered with brown and membranous scales with acicular-fimbriate to soft and twisted white marginal hairs; prophyll not seen; peduncular bract (in bud) ca. 35 cm long, white-floccose externally; rachis to ca. 33 cm long, glabrescent at anthesis with few brown residual scales, ridged between the ca. 19 branches when dry; lowermost branches to 45 cm long including peduncular base ca. 4 cm long and main axis ca. 14 cm long, 2 (–3) times branched into about 12 branches with glabrous rachillae to 26 cm long.

Staminate flowers ca. 4.5 mm high; sepals green, not ciliate, 1.6–2.4 mm high; petals ca. 4 mm high, 2 mm wide; stamens white; pistillode yellow: pistillate flowers ca. 5–6 mm high; bracteoles 1.5–2 mm high; sepals minutely ciliate marginally near base, ca. 3–4 mm high; petals ca. 5–6 mm high; staminodes ca. 1 mm long.



9. *Cyphophoenix nucele* at the type locality. Photograph courtesy of Margaret E. MacKee.

Fruit ellipsoid, ca. 20 mm long, 12 mm in diam.; perianth 8 mm high; seed ca. 11 mm long, 7 mm in diam., raphe branches much anastomosed.

Distribution (Fig. 7): Loyalty Islands; Lifou, on raised coral.

Specimens examined: NEW CALEDONIA: Loyalty Islands; Lifou, forêt sur plateau rocheux,

Kouanoplouéno près Dosip, alt. 60 m, 19 Feb. 1974, *H. S. MacKee 28200* (BH, holotype; P, isotype) and *28201* (BH; P); 27 July 1974, *S. Blancher* as *H. S. MacKee 29035* (BH; P); 1974, *J. Ingwersen s.n.* (BH). [*Däniker 2472* (Z), not seen.]

The epithet for this species is taken from the vernacular name *nucele* noted by Däniker and explained by Dr. MacKee (pers. comm.) as derived from *nu* (coconut) and *cele* (sling), the fruits having formerly been used as projectiles in hunting birds. According to MacKee, the population visited by him is probably the same as that seen by Däniker and the palm is very localized but seems completely native with abundant regeneration in the forest on the raised coral of Lifou. Däniker noted a resemblance to *Basselinia pancheri* (Brongn. & Gris) Vieill. (as *Microkentia*) and suggested that since the species played a role in indigenous religious observances its introduction from elsewhere could not be ruled out, though it seemed an integral component of the natural vegetation. There now seems little doubt that the palm is indeed native.

Differences between *Cyphophoenix elegans* and *C. nucele* appear to be constant and sufficient to warrant specific status for each. As in *Brongniartikentia*, each is confined to a particular edaphic situation and the two are separated by a long distance. In addition to differences noted in the key, the two species appear to be separated by the arcuate versus nearly straight rachis of the leaf (compare Fig. 8, 9). Seed of *C. nucele* has been introduced into cultivation in the United States where it may be expected to do well in southern Florida.

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