

3. *Ptychosperma hentyi*: drawings of seeds in cross-section, A. *Henty & Frodin NGF 27237* (type); B. *Hay 72*; C. *Essig LAE 55197*, immature seed; D. mature seed from *Essig LAE 55197*.

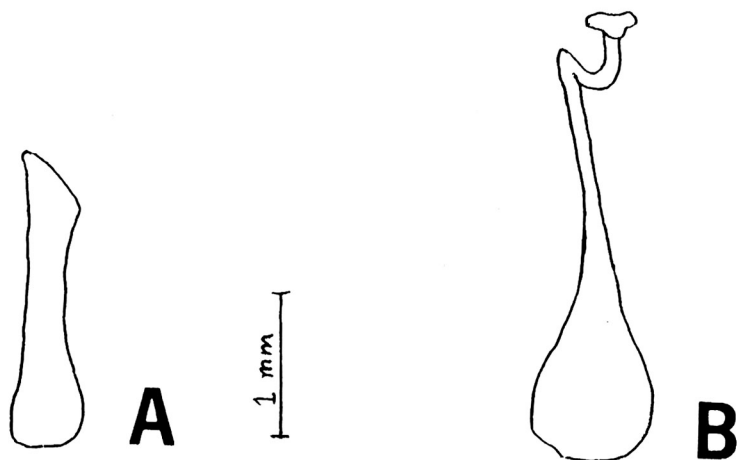
a number of places, if the South African example is any indication, and now with its identity established it should be further distributed.

***Ptychosperma hentyi* Essig sp. nov.**

Palma mediocris, solitaria, frondibus pendulis, pinnis late cuneatis, apicibus praemorsis, convexis, floribus masculis pistillodio inconspicuo; fructus subglobosus; semen leviter 5-lobatum, endospermio ruminato. Typus: Papua New Guinea, East New Britain Province, Kandrian Subprov-

ince, along west side of Pulie River, alt. 100 ft., forest on rising ground, red soil over limestone, 16 March 1966, *Henty & Frodin NGF 27237* (Holotypus LAE; isotypus BH).

A solitary, slender palm to 8 (-10) m in height; stem 6-8 cm diam. Leaves about 10 (-13) in the crown, pendulous, with tips hanging vertically, crownshaft prominent; leaf sheath ca. 45 (-75) cm long, petiole 15-21 cm long, blade 160 (-240) cm long, leaf axis with moderate coating of dark scales; pinnae ca. 12-14 (-21) on each side of the rachis, evenly spaced,



4. Drawings of the pistillode: A. *Ptychosperma hentyi*, Essig LAE 55197; B. *Ptychosperma schefferi*, Essig LAE 55077, for comparison of pistillode typical of the genus.

largest in mid-rachis, diminishing markedly toward the apex; central pinnae broadly cuneate, irregularly praemorse and convex at the tip, longest in the mid-region, ca. 37 (-54) cm long, to 30 cm broad at the apex; apical pinnae 2-5 (-8) cm long, 1-3 cm wide at the tip; pinnae sometimes with scattered rammenta along ribs on the lower surface. Inflorescence to 75 cm long, branching to two orders, peduncle 12 (-17) cm long, with first peduncular bract somewhat exceeding the prophyll in bud; second peduncular bract prominent, triangular-linear, to 9 cm long; rachillae weakly flexuous, 11-20 cm long in fruit, ca. 1.5 mm thick in the lower part when dry, bearing 15-22 triads and diads; inflorescence parts sparsely black-scaly. Staminate flowers ovoid, 6-7 (-10) mm long; petals strongly lined when dry from the prominent, unbranched fibrous bundles within; stamens 25-30, dorsifixed with dark connective; pistillode inconspicuous, ca. 2 mm long, not swollen at the base, pointed and lacking a stigmatic enlargement at the tip; pistillate flower buds ca. 3 mm in diameter during staminate anthesis. Fruit red, nearly globose, 13 mm in diameter (to elongate-ellipsoidal, $23 \times 12-13$ mm);

fruiting perianth to 6 mm high, with 1-2 linear staminodes; seed nearly terete (to strongly 5-lobed) with strongly (to moderately) ruminant endosperm. Vernacular names: none recorded.

Distribution: Eastern New Britain, in the Kandrian, Rabaul and Pomio subdistricts at low elevations. Type specimen growing on "red soil over limestone."

Specimens Examined: PAPUA NEW GUINEA. West New Britain Province: Kandrian Subprovince, along west side of Pulie River, alt. 100 ft., forest on rising ground, red soil over limestone, 16 March 1966, *Henty & Frodin NGF 27237* (LAE holotype, BH isotype); East New Britain Province: Pomio Subprovince, regrowth near Sali Village, at sea level, 16 October 1968, *Millar NGF 40558* (LAE, BH); Rabaul Subprovince, lowland rain forest at Powell Harbour, alt. 30 m, 28 June 1972, *Foreman LAE 52171* (LAE, BH).

Cultivated Specimen: PAPUA NEW GUINEA. Morobe Province: Lae, National Botanic Gardens, alt. 100 ft., location #196 on Essig-Leach map, 13 April 1972, *Essig LAE 55197* (LAE, BH).

Variant Specimen: PAPUA NEW GUINEA. East New Britain Province: Open

Bay Timber Company logging area, alt. 50 m, 13 July 1978, *Hay 72* (USF).

This last specimen, collected by Alistair Hay at Open Bay in East New Britain agrees with the above specimens in general respects, but varies significantly in others. Parenthetical measurements in the species description are derived largely from this specimen. Fruits are substantially larger (to 23 mm long), and elongate-ellipsoidal rather than subglobose. Seeds are clearly 5-lobed, while the typical specimens have nearly terete seeds, sometimes with no hint of lobing. Other dimensions are also somewhat more robust, including those of the staminate flowers (10 mm long vs. 6–7 mm), and the leaves (21 pinnae/side vs. 12–14). Whether this specimen represents another variety or subspecies, or merely an individual variant, remains to be seen as further collections are made in the area.

Acknowledgments

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the initial observation of this species in cultivation at Lae. I thank also Alistair Hay for sending one of his specimens to me, and I apologize to him if my annotations on the specimens at LAE mislead him. I thank the staff of the Division of Botany in Lae for sending specimens, and the staff of the L. H. Bailey Hortorium, Cornell University, for their hospitality while studying their herbarium.

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Conservation of Colombian Palms

The endangerment of Colombian palms is the subject of a survey currently being done by Rodrigo G. Bernal, of Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Bogotá. With the joint support of World Wildlife Fund and The International Palm Society, three expeditions have been planned to critical areas in that country, where palms have been found in the past, many of them described as new species, but which have never been collected again. These expeditions will be the cornerstone for our knowledge of the conservation status of Colombian palms, and for the understanding of the species themselves. This work is essential for a long-term treatment of the Palmae for Flora de Colombia being carried out by Rodrigo G. Bernal and Gloria Galeano-Garcés, as well as for several generic revisions currently in course.