

Pogonotium moorei, a New Species from Sarawak

JOHN DRANSFIELD

*Herbarium, Royal Botanic Gardens, Kew,
Richmond, Surrey TW9 3AB, UK*

In my article "A Day on the Klingkang Range" (Dransfield 1982) I mentioned the excitement of discovering a possible new species of *Pogonotium* from the summit of Gunung Gaharu in Sarawak. I have now been able to examine material of this curious rattan relative in detail and here describe it as new. I name it for Hal Moore, who was much in my thoughts on the day I discovered it and who, I hope, would have been equally excited by its strange morphology.

***Pogonotium moorei* J. Dransfield, sp. nov.** (Fig. 1).

Palmijuncus exiguus a *P. ursino* et *P. divaricato* caule brevi, folio foliola c. 9, lata et remota divaricataque ferenti, fructu obpyriformi seriebus verticalibus 15-16 squamarum aliquantum convexarum tecto bene distincta. Typus: BORNEO, SARAWAK, G. Gaharu, *J. Dransfield et al. JD6102* (holotypus K; isotypi BH, BO, L, PNH, SAR).

Solitary, slender, pleoanthic, spiny, dioecious palm with short erect stem to 2 m only; stem without sheaths ca. 10 mm diam., with sheaths ca. 18 mm, internodes ca. 5 cm long. Leaf sheaths splitting opposite the petiole, armed with abundant,

close, oblique and horizontal, complete or partial whorls of horizontal or reflexed spines and abundant, pale brown, floccose indumentum; spines varying from minute black spicules scarcely 1 mm long, to sinuous papery, black or straw colored spines to 22 × 1 mm with swollen bases; knee scarcely developed; auricles very conspicuous, one on each side of the petiole, erect, to 8.5 cm long, ca. 1.5 cm wide at the base, tapering to ca. 5 mm wide for much of the length, channeled adaxially, armed as the leaf sheath. Leaf to ca. 1.1 m; petiole to 50 cm, 7 mm wide at the base, tapering to ca. 5 mm, flattened adaxially near the base, rounded in distal region, covered with inflated hairs and scabrid due to papillae, and bearing sparse, mostly lateral or abaxial solitary or paired, short, reflexed, bulbous-based black-tipped spines to 5 mm; rachis as the petiole, tapering, very sparsely armed, sometimes ending in a minute cirrus to 15 mm; leaflets distant, very regularly arranged, ca. 9 pairs in all, alternate proximally, distally in opposite, divaricate pairs, ca. 20-32 × 2.2-2.5 cm, except for the smaller apical pair ca. 15 × 2.5 cm; leaflet margin armed with sparse short bristles; adaxial surface smooth, abaxial surface matt, minutely dotted, sparsely indumentose along the fold;

1. *Pogonotium moorei*. **A**, leaf sheath with base of petiole and auricles ×¾; **B**, sheath with inflorescence removed from sheath in **A** ×¾; **C**, petiole and base of first leaflet ×¾; **D**, leaf tip ×¾; **E**, tip of rachilla with pistillate flower ×4; **F**, sterile staminate flower dissected ×4; **G**, fruit ×4; **H**, vertical section of seed ×2; **J**, seedling ×¾. Drawn from *Dransfield JD6102* by Mary Millar Watt.

Table 1. Comparison of species of *Pogonotium*

	<i>Pogonotium ursinum</i>	<i>Pogonotium divaricatum</i>	<i>Pogonotium moorei</i>
Leaflets	90-100 close, ciliate bristly, limp	40-50 narrow, rather distant, sparsely bristly, rigid	ca. 9 broad, remote, very sparsely bristly, rigid
Mature fruit	± barrel shaped	globose	obpyriform
Scales	± flattened, pinkish-brown, in 16-17 vertical rows	grossly swollen and grooved, magenta, in 21-22 vertical rows	slightly convex, pinkish brown, in 16-17 vertical rows

transverse veinlets conspicuous. Inflorescence, only pistillate known, erect, held between the auricles, ca. 18 cm long; peduncle adnate to sheath of following leaf, with free portion 10×7 mm; prophyll beaked, ca. 17 cm, split longitudinally along adaxial (always?) face, covered in dense indumentum and in distal $\frac{2}{3}$ bearing partial whorls of spines as on sheath; two primary bracts also present, included within prophyll and much smaller, and more sparsely armed; prophyll and primary bracts subtending 1st order branches, the inflorescence branching to 2 orders in all; rachillae sinuous, bearing short tubular, triangular tipped, striate, brown bracts each subtending a diad of sterile staminate and fertile pistillate flowers, all ± included in the prophyll. Sterile staminate flower ca. 4.5 mm long, trigonous; calyx striate, ca. 2 mm high, shallowly 3-lobed; corolla split almost to the base into 3 narrow triangular lobes to 4×1.5 mm; sterile stamens 6, filaments fleshy ca. 1.5×0.4 mm; anthers oblong ca. 0.9×4 mm, pistillode minute. Pistillate flower ca. 7.5×3 mm; calyx with a basal tube ca. 2.2 mm and 3 broad triangular lobes ca. 1.5×2 mm; corolla with a basal tube ca. 2.0 mm long and 3 striate lobes ca. 5×2.5 mm; staminodes 6, epipetalous, filaments flattened, ± triangular ca. 1.5×1 mm, empty anthers elongate, ca. 0.75×2 mm; ovary ovoid ca. 2.5×1.8

mm, covered in pale brown scales tipped with 3 sinuous fleshy stigmas ca. 3.5×0.5 mm. Mature fruit borne on persistent perianth whorls, obpyriform, ca. 13×9 mm, tipped with a short beak ca. 1×2 mm, and stigmatic remains; pericarp covered in 15-16 vertical rows of pinkish-brown scales; seed basally attached, ellipsoidal, ca. 11×7 mm; sarcotesta thin; endosperm homogeneous, embryo basal. Germination adjacent-ligular; eophyll with 2 small divergent leaflets, ca. 15×3 mm, tipped with bristles.

BORNEO: SARAWAK, 1st Division, Serian District, Sabal Tapang Forest Reserve, G. Gaharu, summit plateau, montane forest developed on sandstone blocks, alt. 700 m above sea level, *J. Dransfield et al. JD6102* (holotype K; isotypes BH, BO, L, PNH, SAR).

Pogonotium moorei differs from the two other species of the genus, *P. ursinum* (Becc.) J. Dransf. and *P. divaricatum* J. Dransf. in the low habit, the leaf with only about 9 broad, remote divaricate leaflets (*P. ursinum* has about 90-100 close leaflets and *P. divaricatum* about 40-50), and the obpyriform fruit with about 15-16 vertical rows of slightly convex scales. The seedling leaf of the new species with its single pair of minute divergent leaflets is very different from the pinnate eophyll of *P. ursinum*; unfortunately, the eophyll of *P. divaricatum* is not known. These

diagnostic features of *P. moorei* may be contrasted with those of *P. ursinum* and *P. divaricatum* in Table 1 and in my account of *Pogonotium* (Dransfield 1980).

LITERATURE CITED

- DRANSFIELD, J. 1980. *Pogonotium* (Palmae: Lepidocarयोideae) a new genus related to *Dacemonorops*. Kew Bulletin 34: 761-768.
 ———. 1982. A Day on the Klingkang Range, Principes 26: 19-33.

BOOKSTORE

INDEX TO PRINCIPES (Vols. 1-20, 1956-1976, H. E. Moore, Jr., 68 pp.)	\$ 3.00
CULTIVATED PALMS OF VENEZUELA (A. Braun, 1970, 94 pp. and 95 photographs.)	4.50
THE INDIGENOUS PALMS OF SURINAME (J. G. W. Boer, 1965, Part of Flora, 172 pp.)	42.00
PALMS OF SOUTH FLORIDA (G. B. Stevenson, 1974, 251 pp.)	6.00
PALMS OF THE WORLD (J. C. McCurrach, 1960, 290 pp.)	19.00
SUPPLEMENT TO PALMS OF THE WORLD (A. C. Langlois, 1976, 252 pp.)	25.00
THE MAJOR GROUPS OF PALMS AND THEIR DISTRIBUTION (H. E. Moore, Jr., 1973, 115 pp.)	4.50
THE GENUS PTYCHOSPERMA LABILL. (F. B. Essig, 1978, 61 pp.)	5.50
PALM SAGO (K. Ruddle, D. Johnson, P. K. Townsend, J. D. Rees, 1978, 190 pp.)	7.50
HARVEST OF THE PALM (J. J. Fox, 1977, 244 pp.)	16.50
THE DATE PALM (H. Simon, 1978, 155 pp.)	8.95
FLORA OF PANAMA (Palms) (R. E. Woodson, Jr., R. W. Schery, 1943, 122 pp.)	17.00
FLORA OF PERU (Palms) (J. F. MacBride, 1960, 97 pp.)	3.50
INDEX OF AMERICAN PALMS (B. E. Dahlgren) Part 1 Text 1976 (revised ed. by S. Glassman, 294 pp.)	65.00
Part 2 (Herbarium Plates, original, 1959, 416 pp. 412 plates)	18.95
PALEM INDONESIA (in Indonesian) (Sastropdja, Mogeja, Sangat, Afriastini, 1978, 52 illustrations beautifully done, 120 pp.)	5.50

PALMEIRAS DO BRASIL (in Portuguese) (G. Bondar, 1964, 155 pp.)	15.00
PALMS OF MALAYA (T. C. Whitmore, 1973, 132 pp.)	16.95
THE PALM FLORA OF NEW GUINEA (F. B. Essig, 1977, 46 pp.)	5.50
COCONUT PALM FROND WEAVING (Wm. H. Goodloe, 1972, 132 pp.)	3.95
THE MINIATURE PALMS OF JAPAN (U. Okita, J. L. Hollenberg, 1981, 135 pp.)	19.95
PALMS FOR THE HOME AND GARDEN (L. Steward, 1981, 72 pp.)	10.95
PALMS OF BRITISH INDIA & CEYLON (Blatter, 1926 reprinted in India 1978, 600 pp.)	75.00
A MANUAL OF THE RATTANS OF THE MALAY PENINSULA (J. Dransfield, 1979, 270 pp.)	19.00

PALM PAPERS (Postage Included)

THE HARDIEST PALMS (J. Popenoe, 1973, 4 pp.)	1.25
FURTHER INFORMATION ON HARDY PALMS (J. Popenoe, 1973, 4 pp.)	1.25
NOTES ON PRITCHARDIA IN HAWAII (D. Hodel, 1980, 16 pp.)	2.00
PALMS—ANCESTRY AND RELATIONS (B. Ciesla, 1979, a chart)	4.50
RARE PALMS IN ARGENTINA (reprint from <i>Principes</i> , E. J. Pingitore, 1982, 9 pp., 5 beautiful drawings)	2.75

The palm books listed above may be ordered at the prices indicated plus \$1.25 extra per book to cover packaging and postage. (California residents please add 6% sales tax.) Send check in US currency payable to The Palm Society to Pauleen Sullivan, 3616 Mound Avenue, Ventura, California 93003, USA. We also buy and resell old palm books. ALL SALES FINAL.