



Dypsis moorei

long; peduncle c. 90 cm long, c. 2.6 × 1.6 cm diam. medially, distally 1.7 × 1.1 cm, densely scaly; prophyll not seen; peduncular bract caducous, inserted high on the peduncle (*vide* Moore), c. 1.3 m long, green, drying brown; rachis 18–30 cm long, densely scaly; rachillae stiff, 42–51 cm long, c. 7 mm diam., densely scaly, slightly zigzag with distant triads. **STAMINATE FLOWERS** greenish white; sepals 3.3–4.5 × 4–4.9 cm, keeled, gibbous, imbricate; petals 5.7–7 × 3.5–4 mm; stamens 6, biseriate (offset c. 1 mm), filaments connate at the base for c. 0.2 mm, free for c. 2 mm, anthers 2.7–3 × 1.6–2.2 mm, latrorse and versatile, with parallel locules and a wide black connective; pistillode c. 1.3 × 1.2 mm. **PISTILLATE FLOWERS** with sepals 3.5–6 × 6–8 mm, the innermost widest; petals c. 8 × 7.5 mm in bud; staminodes 6, 0.8–1 mm high, flat; ovary slightly stalked, c. 6.5 mm × 2.8 mm. Mature **FRUIT** ± spherical, to 25 × 22 × 22 mm, stigmatic remains lateral or slightly below the equator; endocarp strongly fibrous. **SEED** 22 × 15 × 18 mm, endosperm deeply ruminant, embryo subbasal. **EOPHYLL** deeply bifid.

NOTE. This species is somewhat near *D. perrieri* but differs in the petiole being much longer, the rachis much shorter, the inflorescence branching to 1 order only, with glabrous axes; the peduncle is much more slender; the staminate sepals and petals are larger.

SPECIMENS SEEN. Antalaha: across Onive R from Ambatobe, April 1971 (fl.), Moore 9918 (Holotype P; isotypes BH, K).

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This species is distinctive in its rather open clustering habit, fibrous leaf sheaths that do not form a well defined crownshaft (but lacking pendulous piassava) and the surprisingly long peduncle that projects beyond the leaves. Such inflorescences are reminiscent of those of the group of *Dypsis* species that were formerly included in *Vonitra*. In fact *D. dransfieldii*, as an intermediate between *Vonitra*

and *Neodypsis*, was one of the first pieces of evidence we discovered for the general blurring of generic boundaries within *Dypsidinae*, which has led to the recognition of the single large genus *Dypsis*. Curious rather than beautiful, this palm is a distinctive feature of coastal white sand forests along the western side of the Masoala Peninsula and has been found nowhere else.

DISTRIBUTION. NE Madagascar: Masoala Peninsula.

HABITAT. Littoral forest, on steep or level slope; 2–20 m.

LOCAL NAMES. None recorded.

USES. None recorded.

CONSERVATION STATUS. Endangered. Single site status, in a fragile habitat.

Dypsis dransfieldii Beentje sp. nov.

a *D. nossibense* foliorum foliolorumque numero, pedunculi longitudine differt. Typus: Madagascar, Antalavia, *Dransfield et al.* JD6735 (K holotypus; isotypi P, TAN).

Clustering palm in clumps of 3–5, basally with short stilt roots. Mature **STEMS** unbranched, 6–8 m tall, 7–8 cm diam.; wood very hard; internodes c. 10 cm (2 cm near the crown); bark dull reddish brown, distally with red-brown tomentum, ringed with



Dypsis dransfieldii. Inflorescences in bud and at staminate anthesis (*Dransfield et al.* JD6469).



Dypsis dransfieldii. **A** leaf sheath opened out $\times 1/2$; **B** distal part of petiole with lowermost leaflets $\times 1/2$; **C** mid section of leaf $\times 1/2$; **D** leaf tip $\times 1/2$; **E** mid portion of inflorescence rachis $\times 1/2$; **F** staminate flower, one petal removed $\times 10$; **G** fruit $\times 2$; **H** endocarp and seed in cross section $\times 1.5$. **A – G** from *Dransfield et al.* JD6735, **H** from *Dransfield et al.* JD6468. Drawn by Rosemary Wise.

close leaf scars. **LEAVES** 6–12 per crown, porrect, marcescent; sheaths with thick reddish brown tomentum, 36–48 cm, proximally c. 16 cm wide when flattened, deeply channelled, distally 0.5–1.8 \times 0.6–1.2 cm, with pale brown fibrous tattering, margins 2.5–3 cm wide, red-brown tomentose; on the opposite side from the petiole with a long, mid-brown, 12–16 cm fibrous tongue; petiole absent, but pseudopetiole appearing after disintegration of sheath material, 15–30 cm, channelled, straw-brown with scattered minute scales; rachis 1.3–1.7 m, puberulous or with flaking grey-brown tomentum, in mid-leaf 0.7–1.2 \times 0.5–0.7 cm and keeled; leaflets 33–34 on each side of the rachis, regular, slightly sigmoid, proximal leaflets 28–57 \times 0.4–1.8 cm, median 52–62 \times 1.9–3.2 cm (leaflet interval 4–5 cm), distal 15–39 \times 0.5–2.9 cm, with bifid apices, main veins 3–5, midrib prominent adaxially, apices attenuate, glabrous. Sucker shoots with bifid leaves; young

leaves tinged pink. **INFLORESCENCE** interfoliar, branched to two orders, erect, 2–2.6 m, projecting beyond the leaves, dull reddish brown; peduncle 141–200 cm, round in cross-section, proximally 1.2–2 \times 0.5–1.5 cm, green overlaid with red-brown tomentum, glabrescent, distally 0.7–1.8 \times 0.5–0.8 cm, pinkish; prophyll 72–91 cm long, borne at 7–16 cm above the base of the peduncle, cylindrical, split only near the apex, with flaking red-brown tomentum; peduncular bract pale cream, inserted at 30–44 cm above the base of the peduncle, 124–126 cm long, with scattered scales, beaked for c. 8.5 cm, abscising and carried upwards by the lengthening inflorescence; non-tubular peduncular bracts inserted at c. 89 cm (1.5–6.5 \times 0.7–1.6 cm), 102 cm (1 cm); rachis 30–45 cm, angular in parts, with c. 15 branched and 14 unbranched first order branches, these flattened, swollen and 6 \times 2–3 mm at base; rachillae 18–32 cm, slightly flattened, some-



**Dypsis
dransfieldii**

what pitted, 1.2–2 mm diam. at anthesis, 2.5–3 mm diam. in fruit, covered with dense simple scales; flowers cream-coloured. **STAMINATE FLOWERS** with sepals 0.8–1.4 × 1.4–2.2 mm, unequal, keeled, hooded; petals 2.4–2.5 × 1.6–1.8 mm, ovate, acute; stamens 6, in 1 series (only on large magnification a slight distinction in 2 series apparent), the filaments 0.5–0.8 mm, anthers 1.6–1.8 × 0.4–0.6 mm, dorsifixed, the locules parallel; pistillode 0.8–1 mm high, c. 0.4 mm diam. **PISTILLATE FLOWERS** only known in bud stage, with sepals c. 1.5 × 1.8 mm, petals c. 1.3 × 1.2 mm, gynoecium c. 1 × 0.7 mm. **FRUIT** ovoid, 15–20 × 12–14 mm, with persistent sepals 2–3 mm and persistent petals 3.5–6 × 5 mm, fruit verrucose when mature. **SEED** c. 13 × 9 mm; endocarp with loose fibrous strands 10–22 mm long, the basal ones longest; endosperm ruminate for 2–2.5 mm. **EOPHYLL** bifid, with scaly petiole; scale leaves 2 (respectively 2 and 5–7 cm long).

NOTE. This species differs from *D. nossibensis* in the number of leaves, the number of leaflets, and the size of the peduncle.

SPECIMENS SEEN. Maroantsetra: Antalavia, Feb. 1988 (fr.), *Dransfield et al.* JD6468 (K, P, TAN); idem, Feb. 1988 (fr.), *Dransfield et al.* JD6469 (K, TAN); idem, Nov. 1989 (fl.), *Dransfield et al.* JD6735 (K holotype; isotypes P, TAN); idem, Nov. 1989 (seedling), *Dransfield et al.* JD6736 (K, TAN).



Dypsis dransfieldii. View of the crown showing long peduncle, Antalavia (*Dransfield et al.* JD6469).