



Dypsis nauseosa, a canopy palm of the forest at Manombo.

small triangular part, ciliolate; staminodes six, flat, up to 0.7 mm high. Young **FRUIT** fleshy; mature fruit not seen. **SEED** ellipsoid with slightly asymmetrical pointed base and rounded apex, $15-16 \times 12-14$ mm, with a very adherent endocarp, close-fitting, appearing fibrous at base but more distally so anastomosing that it seems a smooth coat with a few pits; sub-basal depression of 3 mm diam.; endosperm ruminate, the intrusions many, wavy and irregular, 2–6 mm deep.

SPECIMENS SEEN. Mananjary: Mt Vatovavy, Oct. 1911 (fl.), *Perrier* 12087 (Holotype P). Manakara: Amby, May 1992 (dead infl.), *Beentje & Andriampaniry* 4679 (K, TAN). Farafangana: Manombo, Nov. 1991 (y. fr.), *Beentje & Andriampaniry* 4510 (BH, K, MO, P, TAN); idem, Nov. 1991 (seed) *Beentje & Andriampaniry* 4516 (K).

8. DYPSIS OROPEDIONIS

Although the material of this palm is incomplete, it needs a name; it is clearly distinct, and severely threatened. The specific name is Greek for 'of the plateau', referring to the habitat.

DISTRIBUTION. Known from two sites on the western side of the central high plateaux.

HABITAT. Relict dry evergreen plateau forest in steepsided valleys; 1100–1450 m.

LOCAL NAMES. Not recorded.

USES. Not recorded.

CONSERVATION STATUS. Critical. Numbers within the two sites were low; both populations are without real protection, with their habitat under serious threat from annual fires as well as tree-cutting.

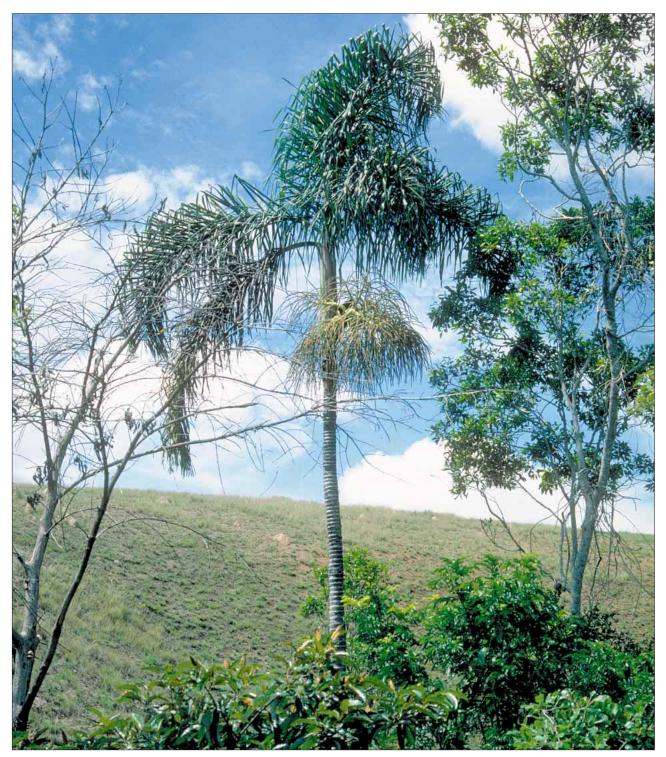


Dypsis oropedionis Beentje sp. nov.

inter species maximas foliolis fasciculatis inflorescentiis multo ramosis pedunculo breve rachillis glabris endospermio ruminato distincta. Type: Madagascar: Ambohitsaratelo, *Dransfield et al.* JD6446 (Holotypus K; isotypus TAN).

Solitary palm. **TRUNK** 8–20 m tall, 27–35 cm diam., near the crown c. 20 cm diam.; internodes 10–20 cm, grey-brown but distally green, nodal scars pronounced, 4–5 cm; crownshaft grey-green, covered in white wax. **LEAVES** tristichous, 6–11 in the crown, porrect to spreading; sheath grey-green, white-waxy, 80–157 cm, without auricles; petiole 25–35 cm long, channelled, densely scaly, $5.5-6 \times 4.5-5$ cm diam.; rachis c. 3.1 m, in mid-leaf c. 3.5 cm wide; leaflets 80–172 on each side of the rachis, in groups

of 3–9 and fanned within the groups, stiff with the distal 1/3 pendulous, the proximal $80-93 \times 1.7-2.1$ cm, median $102-110 \times 2-3.5$ cm, distal $15-43 \times 0.8-1.8$ cm, main vein 1, plus thickened margins, with few ramenta to 8 mm long, otherwise glabrous, apices unequally bifid, attenuate. **INFLORESCENCE** infrafoliar, branched to 3 orders, spreading, $85-130 \times 90-100$ cm; peduncle 18-40 cm, c. 10×6 cm diam., glabrous; prophyll c. 72×20 cm, borne at c. 11 cm above the base of the peduncle, erect, split over its length; peduncular bract deciduous, inserted at 18 cm from the base of the peduncle, 87 cm long, 24 cm wide, closed for its distal 7 cm beak; rachis with c. 27 branched and 13 unbranched first order branches, these proximally $3.4-4 \times 1.4-1.5$ cm diam.; rachis bracts to 7 mm long; rachillae spreading-pendulous, cream, 10-37 cm long, 3.5-5 mm diam., glabrous, with distant



Dypsis oropedionis, surviving in a forest fragment in the midst of degraded man-made grassland.

triads. **STAMINATE FLOWERS** with sepals $1.4-1.5 \times 1-1.2$ mm; petals connate for c. 0.5 mm, the free parts $1.8-2.1 \times 1.2-1.3$ mm; stamens 6, uniseriate, filaments c. 1 mm and curved, anthers $0.8-0.9 \times 0.4-0.5$ mm; pistillode c. $1.3 \times 0.3-0.4$ mm. **PISTILLATE FLOWERS** unknown. **FRUIT** only known from endocarps, ellipsoid, $7.5-10 \times 6-7.5$ mm, with almost free fibres. **SEED** subglobose to ellipsoid, $7-8 \times 5.5-6$ mm; endosperm ruminate, with few columnar intrusions to 1.5 mm deep and 1 mm diam.

NOTE. Probably closest to *D. pilulifera*.

SPECIMENS SEEN. Miandrivazo: Ambohitsaratelo, Nov. 1986 (fl., fr.), *Dransfield et al.* JD6446 (Holotype K; isotype TAN). Ankazobe: Manerinerina, April 1992 (fr.), *Beentje et al.* 4659 (K, TAN).

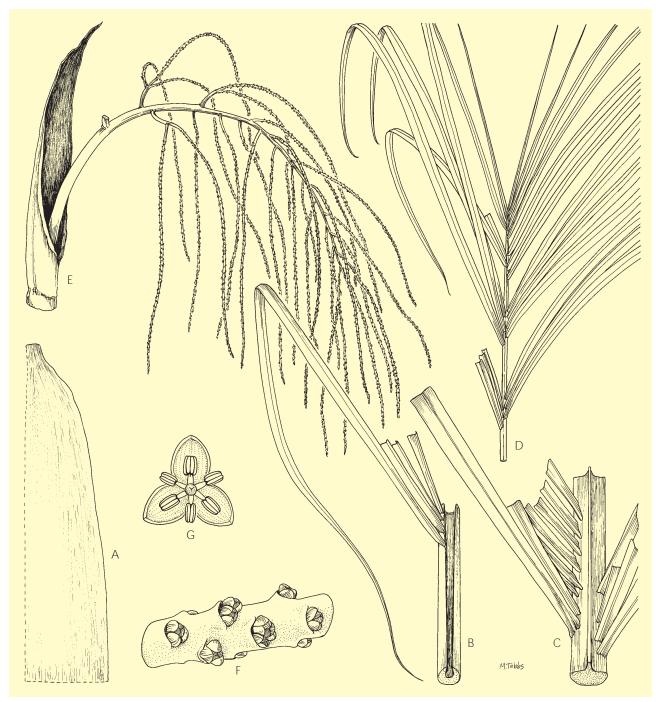
9. DYPSIS PILULIFERA

A large and beautiful tristichous palm, virtually unknown until a few years ago, but found recently in several places.

DISTRIBUTION. Sambirano region, Marojejy, and Mantady.

HABITAT. Moist submontane forest; slight or steep mid slopes; alt. 750–950 m.

LOCAL NAMES. *Ovomamy* (Tsimihety), *Lavaboko* (Marojejy), *Hozatanana* (Mantady).



Dypsis oropedionis. A leaf sheath $\times 1/4$; **B** distal part of petiole with lowermost leaflets $\times 1/4$; **C** mid section of leaf $\times 1/4$; **D** leaf tip $\times 1/4$; **E** inflorescence $\times 1/4$; **F** detail of rachilla $\times 3$; **G** staminate flower $\times 6$. All from *Dransfield et al.* JD6446. Drawn by Margaret Tebbs.