



**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 × 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 ruminant, 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. DYPISIS 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 steep-sided 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** Beertje **sp. nov.**

inter species maximas foliis fasciculatis inflorescentiis multo ramosis pedunculo breve rachillis glabris endospermio ruminato distincta. Type: Madagascar: Ambohitsaranelo, *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 × 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 × 1.7–2.1 cm, median 102–110 × 2–3.5 cm, distal 15–43 × 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 × 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 × 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 × 1–1.2 mm; petals connate for c. 0.5 mm, the free parts 1.8–2.1 × 1.2–1.3 mm; stamens 6, uniseriate, filaments c. 1 mm and curved, anthers 0.8–0.9 × 0.4–0.5 mm; pistillode c. 1.3 × 0.3–0.4 mm. **PISTILLATE FLOWERS** unknown. **FRUIT** only known from endocarps, ellipsoid, 7.5–10 × 6–7.5 mm, with almost free fibres. **SEED** subglobose to ellipsoid, 7–8 × 5.5–6 mm; endosperm ruminant, 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. DYPISIS 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 orpedionis.** **A** leaf sheath × 1/4; **B** distal part of petiole with lowermost leaflets × 1/4; **C** mid section of leaf × 1/4; **D** leaf tip × 1/4; **E** inflorescence × 1/4; **F** detail of rachilla × 3; **G** staminate flower × 6. All from *Dransfield et al.* JD6446. Drawn by Margaret Tebbs.