



**Dypsis
tsaravoasira**

with distant triads in slight pits. No flowers have been seen; fruit only seen when young.

Similar is possibly *Moore* 9919 from Masoala: Ambohitralanana, April 1971 (fr.) with the leaf sheath c. 90 cm, petiole 45 cm, rachis 3.2 m, but this has interfoliar inflorescences with rachillae 19–29 cm and fruits 16–17 × 12–13 mm, with homogeneous endosperm; the leaves are said to be in five ranks. The local name is *Buresy*.

7. DYPISIS NAUSEOSA

We found this species some eighty years after the type (and up to that time, only) collection by Perrier, though we failed to find it on Vatovavy. The name indicates the supposed poisonous palm-heart, which is also reflected in local names.

DISTRIBUTION. Known only from the coastal parts of Fianarantsoa Province.

HABITAT. Eastern forest, possibly rather dry; 50–200 m.

LOCAL NAMES. *Rahoma*, *Mangidibe* (Antaisaka, means very bitter), *Laafa* (general palm name).

USES. Wood used for roofing beams, outer wood used for floorplanks. Palm-heart bitter, said to be poisonous.

CONSERVATION STATUS. Critical. Only known from two recent collections, both from areas where the forest is being cut down at a rapid rate. Less than twenty trees are known to exist.

Dypsis nauseosa (*Jum. & H. Perrier*) *Beentje & J. Dransf. comb. nov.*

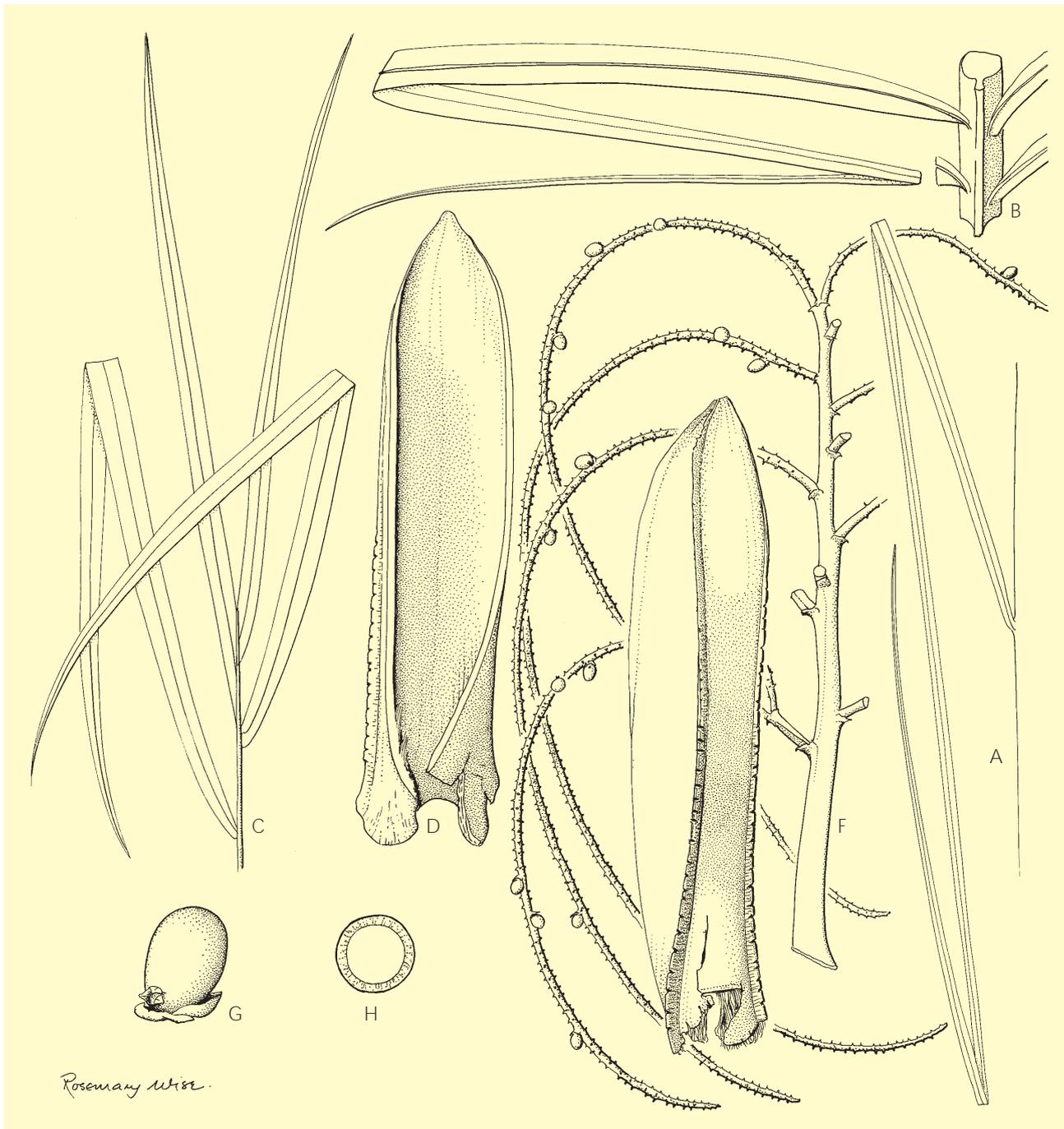
SYNONYM:

Neodypsis nauseosus Jum. & H. Perrier, Ann. Inst. Bot.-Géol. Colon. Marseille sér. 3, 1 (1): 19, pl. VI (1913); Jum., Ann. Inst. Bot.-Géol. Colon. Marseille sér. 4, 2 (2): 31 (1924); Jum., Cat. Pl. Madagascar, Palmae: 18 (1938); Jum. & H. Perrier, Fl. Madagascar 30: 156 (1945). Type: Madagascar, Mt Vatovavy, *Perrier* 12087 (Holotype P).

Solitary palm. **TRUNK** 7.5–15 m, 20–25 cm diam., with a basal swelling 47–58 cm diam.; internodes 10–23 cm, pale brown, nodal scars c. 3 cm; wood medium soft, white or pink. **LEAVES**



Dypsis nauseosa. Inflorescence (*Beentje & Andriampaniry* 4510).



Dypsis nauseosa. **A** lowermost leaflet $\times 1/4$; **B** mid section of leaf $\times 1/4$; **C** leaf tip $\times 1/4$; **D** prophyll, adaxial view $\times 1/5$; **E** prophyll, abaxial view $\times 1/5$; **F** first order branch of infructescence $\times 1/3$; **G** fruit $\times 1$; **H** fruit in cross section $\times 1$. All from *Beentje & Andriampaniry* 4510. Drawn by Rosemary Wise.

12–13 in the crown, spirally arranged, stiff, porrect-spreading; sheath (open?) 91–105 cm and 26–28 cm diam., without ligules or with ligules c. 2 \times 2 cm, glabrous, green (turning pale brown) with white waxy covering and scattered scales, adaxially cherry-red; petiole absent or to 27 cm long, 6.5–10 cm wide, c. 3.5 cm thick; rachis 3.4–3.9 m long, in mid-leaf c. 3 \times 2 cm diam. and here channelled or keeled; leaflets 108–131 on each side of the rachis, regular, in one plane, spreading to almost pendulous, the proximal 78–123 \times 1.3–2.2 cm, median 90–133 \times 3.3–4.3 cm (interval 2–4 cm), distal 30–50 \times 1.2–2.5 cm, top pair not connate, sometimes abaxially with a few small black scales proximally and few ramenta, apices unequally acute, bifid, main vein 1 (– 5). **INFLORESCENCE** infrafoliar, erect and spreading, 150–200 \times 80 cm, branched to 3 orders; peduncle 83–96 cm long, proximally c. 8 \times

5 cm diam., distally c. 3.5 \times 3 cm, curved; prophyll 43–50 \times 10–12 cm; peduncular bract deciduous, 70–100 \times 14 cm (inserted at 25–35 cm from the base of the peduncle), pale brown with dense but scattered reddish scales, beaked and closed for 9–30 cm; non-tubular peduncular bract c. 1.5 \times 4 cm; rachis 50–90 cm long, puberulous, with 13–17 branched and 9–10 unbranched first order branches, the proximal of these with a rachis of up to 18 cm, at base 2.5–3 \times 0.4–1 cm diam., and with up to 12 rachillae or second order branches; rachillae 14–47 cm, 3–5 (in fruit up to 6) mm diam., glabrous; rachilla bract c. 1 mm, broadly triangular, acute; triads distant, in shallow pits. **STAMINATE FLOWERS** in bud ovoid, 2.5 mm high; sepals as large as wide, truncate, keeled. **PISTILLATE FLOWERS** in fruit with sepals 1.5–2 \times 2.3 mm; petals 2.8–4 \times 3.3–4.4 mm, unequal, imbricate and broadly ovate proximally, near the apex with a



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.

