

rachis, grouped and fanned in 3s-6s, the group interval 3-7 cm, bent downwards at two-thirds of their length, the proximal 120-242  $\times$ 0.7-2.4 cm, median 123-135 × 3.3-4 cm, distal 22-50 × 0.6-2 cm, connate for 1.5-4 cm, with a few large laciniate ramenta, without scattered scales. **Inflorescence** infrafoliar, c.  $0.5-1 \times 0.5-1$  m, branched to 2-3 orders; peduncle 18-26 cm, diam. 7 x 3 cm; prophyll 21-30 cm, borne at 3-4 cm above the base of the peduncle; peduncular bract deciduous, inserted at 9-11 cm from the base of the peduncle,  $45-66 \times 10-12$  cm, not beaked or briefly beaked with triangular beak, split for 90%; non-tubular peduncular bract occasionally present on upper peduncle, to 20 cm; rachis 48 cm, with 14 branched and 10 unbranched first order branches; rachillae stiff or sub-pendulous, green to yellow-green, 16-40 cm long, 4-8 mm diam., glabrous, with dense flowers. STAMINATE FLOWERS only known in rather young bud, with sepals  $2.1-3 \times 2.5-2.8$  mm, very hooded; petals < 1.5 mm; stamens 6, < 1.3 mm, probably versatile. PISTILLATE FLOWERS only known from the young fruit stage, with sepals 2.7-3.1 × 3-3.3 mm; petals 3.5-3.8 × 3-4 mm; staminodes 6, flat, tooth-shaped, 0.5 mm. FRUIT not known, except for the fibrous endocarp. SEED obovoid with pointed base, 9-10 x 7-8 mm, with homogeneous endosperm. **EOPHYLL** entire, deeply bifid.

**NOTE.** Possibly closest to *D. tokoravina*, but with a totally different leaf sheath.

**SPECIMENS SEEN.** Maroantsetra: Antalavia, Feb. 1988 (y.fr.), Dransfield et al. JD6473 (K, P, TAN); idem, Nov. 1989 (bud), Dransfield et al. JD6744 (Holotype K; isotypes P, TAN). Mananara Avaratra: Antanambe, Oct. 1994 (fl., fr.), Beentje & Dransfield 4819 (K, TAN); idem, Oct. 1994 (bud), Beentje & Dransfield 4827 (K, TAN).

## 4. Dypsis ceracea

This species has not been collected for almost fifty years, and the material is rather poor. This is another mystery, resembling *D. bejofo* and *D. canaliculata*.

**DISTRIBUTION.** Only known from the Marojejy area and Betampona.

**Habitat.** Moist lowland forest; 450 m (fide Cours).

LOCAL NAMES. Lafaza (Betsimisaraka).

**Uses.** Leaves used in thatching.

Conservation Status. ?Extinct; not seen since 1949.

Dypsis ceracea (Jum.) Beentje & J. Dransf. comb. nov.

## SYNONYM:

*Neodypsis ceraceus* Jum., Ann. Inst. Bot.-Géol. Colon. Marseille sér. 5, 1 (1): 18 (1933); Jum., Cat. Pl. Madagascar, Palmae: 17 (1938); Jum. & H. Perrier, Fl. Madagascar 30: 144 (1945). Type: Madagascar, Betampona near Ambodiriana, *Perrier* 17474 (Holotype P).

Solitary palm. Trunk 8-15 m high, cylindrical, 8-15 cm diam. LEAVES: sheath medium brown with a dense layer of wax, the young sheath bright pink, without ligules or auricles, distally with medium-sized laciniate scales; petiole c. 35 cm long, waxy, with scattered scales; rachis in mid-leaf 1.4-1.8 cm wide, keeled, with scattered scales, slightly waxy; leaflets in groups of 4-6, the group interval > 6 cm, the leaflet interval 0.5-1 cm, "hanging towards the middle" (Perrier); proximal 82-86 x 2.5-3.2 cm, median  $55-92 \times 2.3-2.9$  cm, distal  $13-39 \times 0.3-2$  cm, adaxially dark green, abaxially glaucous, with sparse large ramenta (6-10 mm long) on the proximal midrib, with minute reddish scales scattered over the minor veins, main vein 1, with slightly thickened margins, apex unequally attenuate. Inflorescence interfoliar, branched to 3 orders (or more); prophyll coriaceous; peduncular bract coriaceous, deciduous, with a rather long beak; first order branch seen with secondary rachis of 6-20 cm, proximally  $1-3 \times 0.5-1.3$ cm, glabrous, with 7-12 second order branches; rachis bracts up to 12 mm long; rachillae 16-30 cm long, 3-4.5 mm diam., with distant triads in shallow pits; rachilla bracts proud, rounded to acute. Staminate flowers not seen. Pistillate flowers not seen at anthesis; in the fruit the sepals are  $3.7-4.1 \times 3.9-4.7 \text{ mm}$ (the outermost largest), obtuse, with membranous margins; petals 5-6 x 3.9-4.7 mm, the innermost largest; staminodes 0.5-1.1 mm, thin and flat. **FRUIT** ellipsoid,  $16-20 \times 8.5-12.5$  mm, rounded at base and apex, with sub-basal stigmatic remains (with a ridge to the stalk); endocarp fibrous, with slightly anasto-



mosing fibres. **Seed** ellipsoid,  $12-13 \times 5-6$  mm, pointed at the base, rounded at the apex, attached to the spot corresponding to the stigmatic remnant on the outside; endosperm deeply ruminate, the ruminations reaching the middle.

**Note.** The following data from the protologue do not appear on the type label: found at 100 m altitude. This species resembles both *D. bejofo* and *D. canaliculata* but is distinct in the smaller and thinner trunk, the more branched inflorescence and the much smaller fruit.

**SPECIMENS SEEN.** Andapa: Mt Mainampango, Amtalavanio, Jan. 1949 (fr.), *Cours* 3234 (K, P, TAN). Toamasina: Betampona, Dec. 1925 (fr.), *Perrier* 17474 (P, type).

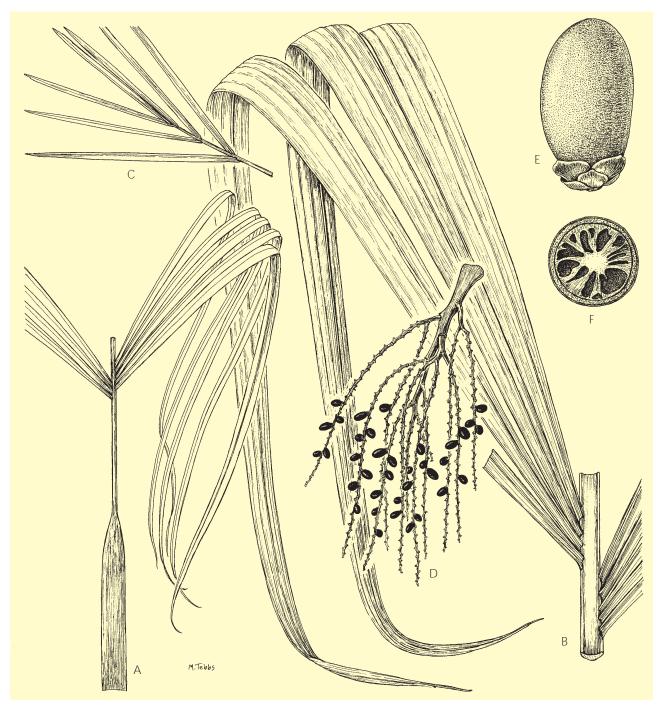
## 5. DYPSIS AMPASINDAVAE

A rare species, with the leaves in three ranks. The new name refers to the village nearest to the forest where the type was found, and where HB stayed when he refound the species ('the sand across the bay' in Malagasy).

**DISTRIBUTION.** Restricted to Nosy Be and Manongarivo Mountains.

**Habitat.** Moist lowland forest, on steep mid slope; 10–200 m.

**LOCAL NAMES.** Lavaboka (Tsimihety).



**Dypsis ceracea.** A leaf sheath, petiole and basal leaflets  $\times$  1/5; **B** mid section of leaf  $\times$  1/2; **C** leaf tip  $\times$  1/5; **D** part of infructescence  $\times$  1/5; **E** fruit  $\times$  2; **F** fruit in cross section  $\times$  2. All from *Perrier* 17474. Drawn by Margaret Tebbs.