plumose leaves. It is probably close to *D. hovo-mantsina* and *D. canaliculata*. The seed is most unusual and distinctive and until recently we thought of a form unique within the genus. However, in 1994 JD saw similar, but smaller, seed with entirely different seedlings in cultivation in Australia, seed source unknown, but 'from Madagascar'.

SPECIMENS SEEN. Maroantsetra: Andranofotsy R, Sahavary, Oct. 1986 (bud, fr.), *Dransfield et al.* JD6405 (Holotype K; isotypi P, TAN), and Feb. 1988 (fl., y.fr.), *Dransfield et al.* JD6461 (K, P, TAN). Mananara Avaratra: Manambato forest, Feb. 1987 (y.fr.), *M. Nicoll* 439 (K, TAN); Antanambe, Oct. 1991 (bud, fr.), *Beentje* 4485 (BH, K, MO, P, TAN).

2. Dypsis canaliculata

This species is something of a mystery. It has not been found since 1951, and the flowers are unknown to science. The two collections made so far are far apart geographically, but seem to belong to the same taxon. The name was given to indicate that the leaf rachis is channelled in its lower half, but this is not so exceptional as Jumelle seemed to think!

DISTRIBUTION. Only known from the Manongarivo area and from near Ampasimanolotra.

HABITAT. Forest on sandstone; c. 200 m.



Dypsis canaliculata. A mid section of leaf \times 1/4; **B** subapical portion of leaf \times 1/4; **C** detail of undersurface of leaflet \times 2; **D** first order branch of inflorescence \times 1/2. All from *Perrier* 15413. Drawn by Margaret Tebbs.



LOCAL NAMES. *Lopaka* (Antankarana); *Monimony* (Betsimisaraka).

USES. Palm-heart bitter, said to be poisonous by some. **CONSERVATION STATUS.** Possibly extinct; not seen since 1951.

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

SYNONYM:

Neodypsis canaliculatus Jum., Ann. Inst. Bot.-Géol. Colon. Marseille sér. 4, 2 (2): 9 (1924); Jum., Cat. Pl. Madagascar, Palmae: 17 (1938); Jum. & H. Perrier, Fl. Madagascar 30: 141 (1945). Type: Madagascar, Bas-Sambirano, W base of Mt Kalabenono, Perrier 15413 (Holotype P).

Solitary palm. TRUNK 10-15 m high, 30-40 cm diam.; nodal scars very visible. **Leaves** with sheath c. 1 m long, glabrous, whitish-green and waxy; petiole absent; rachis 3-4 m long (fide Perrier) or c. 6 m (fide Cours), in mid-leaf 2.5-3.5 cm wide, waxy, channelled adaxially at least proximally, rounded abaxially; leaflets bright green, grouped and fanned within the groups, the group interval 2-3 cm, very many, not stiff, interval 0.2-1.3 cm, proximal not seen, median 75-116 × 2.6-3.1 cm, distal to 13-30 × 0.3-0.8 cm, glaucous, with many ramenta proximally, the ramenta bifid, to 2 mm long, 2-3 mm high, and with minute reddish scales over the entire abaxial surface, main vein 1, apex unequally attenuate. Inflorescence infrafoliar, branched to 2 orders, short and pendulous; parts seen include first (?) order branches with a glabrous rachis of up to 20 cm, proximally up to 1.7 x 0.8 cm diam., with up to 8 rachillae; rachillae 35-48 cm long, 5-6 mm diam., glabrous, waxy, with distant triads in pits, the rachilla bracts proud, rounded or obtuse. STAMINATE FLOWERS unknown. PISTILLATE FLOWERS unknown. FRUIT ellipsoid or rounded, 25-30 x 17-21 mm when dry. SEED subglobose, 15-21 x 12-16 mm; endosperm deeply and densely

Note. The protologue states the type is *Perrier* 1541, but this is changed in the Flora to 15413 (which is correct). The type at P is currently without fruit or flowers.

In the protologue there are the following data not on the type label: trunk green, 10-15 m high, 30-40

cm diam. Leaves 3–4 m long; sheath green, glabrous; petiole absent, rachis 2.5 cm wide; leaflets irregularly grouped (group interval c. 2 cm), distal 30×0.7 –0.8 cm. Inflorescence branched to 2 orders; rachillae c. 50 cm.

This taxon resembles *D. bejofo*, but is distinct in the almost continuous ramenta on the midrib and the scattered scales, and by the absence of a petiole.

The *Cours* specimen is rather poor, and is included with some doubt. The fruit in this specimen has densely and irregularly ruminate endosperm, distinct from that of *D. bejofo*.

SPECIMENS SEEN. Ambilobe: W base of Mt Kalabenono, no date (infl. only), *Perrier* 15413 (P, type). Ampasimanolotra: near Anivoranokely and Andrambolahikely, April 1951 (fr.), *Cours* 4494 (K, P, TAN).

3. Dypsis hovomantsina

An impressive tree; we found a second site only three months before the book went to press. The leaf-sheaths are distinct from any other, with their lower parts white-waxy and a golden-brown furry part at the very top. The name comes directly from the local name, which means stinking and refers to the smelly palm-heart.

DISTRIBUTION. Only known from Maroantsetra and Mananara.



Dypsis hovomantsina. View of crown, showing goldenbrown hairs at petiole base, Mananara Avaratra (*Beentje & Dransfield* 4819).