1. DYPSIS BEJOFO

One of the most impressive palms of Madagascar. The massive trunk and enormous leaves, sometimes arranged in three rows in an arching crown, give this tree a majestic appearance. This would be a spectacular ornamental tree for grand landscaping in the tropics. Seeds have been widely distributed (but see note below). The local name has supplied us with the specific epithet.

DISTRIBUTION. Only known from Maroantsetra and Mananara, around the Bay of Antongil.
HABITAT. Moist lowland forest; steep slope; 200–400 m.
LOCAL NAMES. *Bejofo*, *Hovotraomby* (Betsimisaraka).
USES. Not recorded.
CONSERVATION STATUS. Endangered. Only known from two sites, where numbers are low.

Dypsis bejofo *Beentje* **sp. nov.**
Palma excelsa foliis maximis foliolis aggregatis inflorescentia curta multo ramosa seminibus profunde canaliculatis distincta. Typus: Madagascar, Maroantsetra: Andranofotsy R., Sahavary, Oct. 1986, *Dransfield et al.* JD6405 (Holotypus K; isotypi P, TAN).

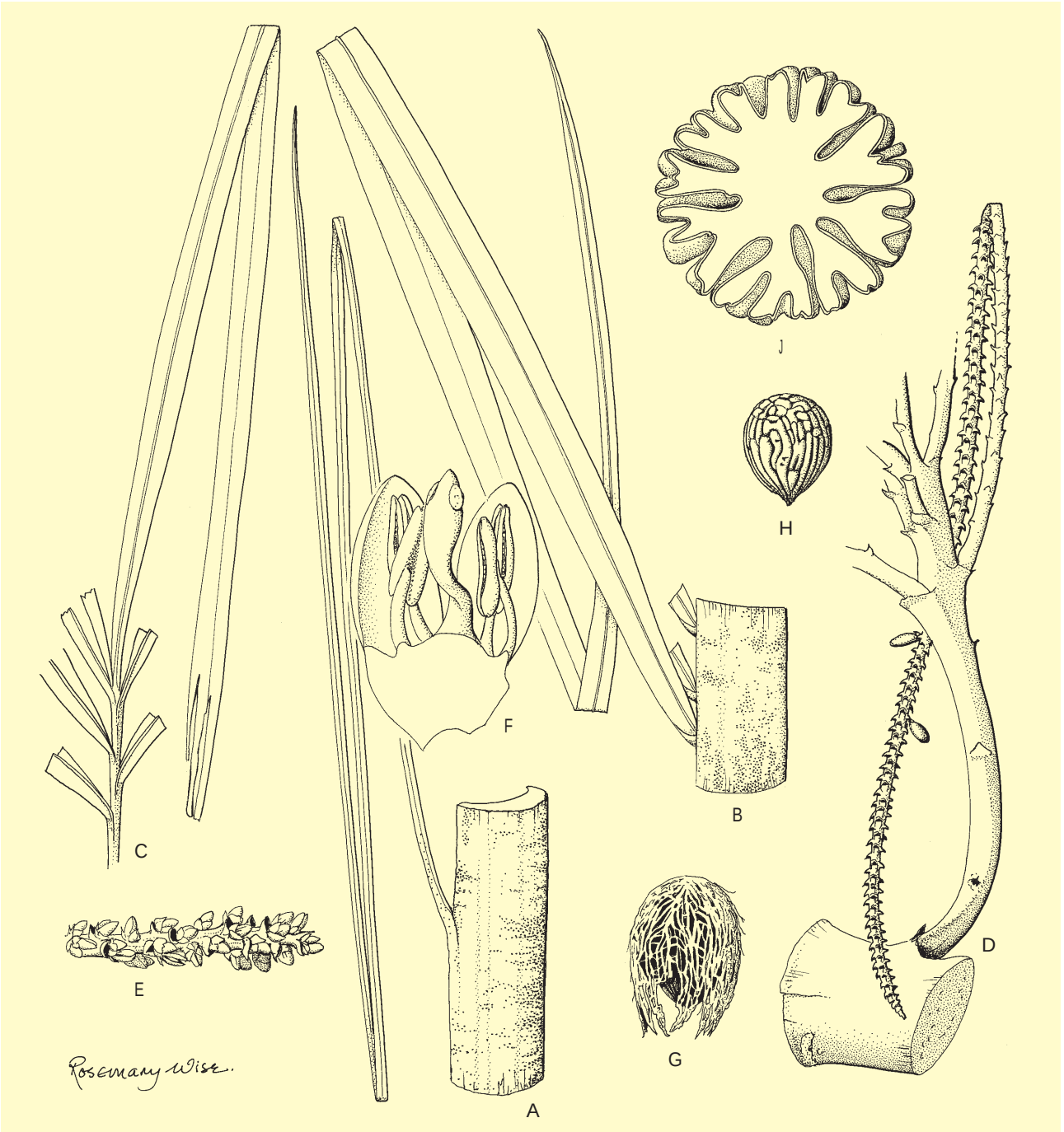
Solitary canopy palm. **TRUNK** 15–25 m high, 25–40 cm diam., near the crown c. 20 cm diam.; internodes 20–35 cm, pale reddish brown, near the crown 2–10 cm, dark green to ashy grey; crownshaft white, waxy. **LEAVES** 7–10 in the crown, sub-tristichous, porrect and arching; sheath 1–2 m, 25–40 cm diam., abaxially white waxy and distally dense red-brown scaly, adaxially peach-coloured; petiole 12–34 cm long, 4.5–15 cm wide, densely pubescent; rachis 3–6 m long, brown-scaly, in mid-leaf 2.5–5 x 1.5–4 cm, channelled in the proximal 2 m; leaflets 80–100 on each side of the rachis, in groups of 5–7 and fanned within the groups, group interval 8–10 cm, rich green, stiff or arched, the distal part often bent down, the proxi-

Dypsis bejofo, a massive palm, reaching above the forest canopy, Sahavary.

Dypsis bejofo. David Cooke holds the massive waxy leaf sheath, Sahavary (*Dransfield et al.* JD6405)

mal 90–200 x 0.4–1.7 cm and often with the most proximal pendulous, median 72–144 x 1.3–4 cm (interval 0.5–2 cm), distal 30–69 x 0.6–1.8 cm, main vein 1, with few rameta 5–6 mm long on the midrib, otherwise glabrous and waxy, apices unequally bifid, attenuate. **INFLORESCENCE** infrafoliar, branched to 2 (– 3) orders, 0.5 x 0.5–1 m, yellow-green with sub-pendulous rachillae; peduncle 13–20 cm long, 5–10 x 3–7 cm diam., green with scattered scales; prophyll 20–30 cm long, to 19 cm wide, borne on the peduncle at 2–4 cm, with scattered scales; peduncular bract inserted at 5–9 cm from the base of the peduncle, 54–91 cm long and 10–17 cm wide, with scattered scales, flushed pink or pale lavender, split except for the beak; non-tubular peduncular bract rarely present, once seen 18 cm long; rachis 20–52 cm long, glabrous or with scattered scales, with 15–17 first order branches, these proximally 1.3–6 x 0.5–2.2 cm diam.; rachillae 20–44 cm long (to 73 cm in fruit), green, stiff, 3.5–10 mm diam., glabrous, with dense, slightly sunken triads; rachilla bract 2 mm long. **STAMINATE FLOWERS** scented like *Sambucus nigra*; sepals 2.3–2.8 x 2.1–2.4 mm; petals connate for c. 1 mm, free parts 4.1–4.5 x 2.3–2.5 mm; stamens 6, slightly biseriate (offset 0.2 mm), filaments 1.5–1.8 mm, cylindrical, anthers 2.2–2.7 x 0.7–1 mm; pistillode 4 x 1 mm. **PISTILLATE FLOWERS** in young fruit with sepals 2.8–3.2 x 2.5–3.7 mm; petals 3.7–4.3 x 4–5.3 mm. **FRUIT** with very fibrous endocarp, 20–25 x 18–21 mm. **SEED** ellipsoid, black, deeply grooved, 17–23 x 15–20.5 mm; endosperm deeply penetrated, the grooves regular and dense, 2–9 mm deep.

NOTE. When this tree is sterile it resembles *D. pilulifera*, which is less massive and has less strikingly



Dypsis bejofo. **A** Proximal part of leaf with lowermost leaflet x 1/3; **B** mid section of leaf x 1/3; **C** leaf tip x 1/2; **D** part of inflorescence showing tip of peduncle and basal first order branch x 1/2; **E** detail of rachilla x 2/3; **F** staminate flower in section x 6; **G** seed enveloped by fibrous endocarp x 1; **H** seed x 2/3; **J** seed in cross section x 2.5. **A**, **C** – **F** from *Dransfield et al.* JD6461, **B**, **G** – **J** from *Dransfield et al.* JD6405. Drawn by Rosemary Wise.

plumose leaves. It is probably close to *D. hovomantsina* 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 x 1/4; **B** subapical portion of leaf x 1/4; **C** detail of undersurface of leaflet x 2; **D** first order branch of inflorescence x 1/2. All from *Perrier* 15413. Drawn by Margaret Tebbs.