

LOCALITY UNCERTAIN: W Madagascar, (fr.), *Perrier* s.n. (P); Boina, Ambodisoaha?, Nov. 1896 (y.fr.), *Perrier* 145 (P, syntype *C. oleraceus*).

SIGHT RECORDS. Antsiranana: Analamerana, Ampondrakely R. valley, 1994 (*D. Du Puy*). Nosy Be: Nosy Komba, 1992 (*Beentje*). Ambilobe, Ambanja: common in the Ambanja–Ambilobe area. 1992 (*Beentje*); Ankify peninsula, 1992 (*Beentje*). Analalava: 11km N of Maromandia, 1992 (*Beentje*). Antsohihy: 20–30km N of Antsohihy, 1992 (*Beentje*); Bora Réserve Speciale, 1992 (*Beentje*). Maevatanana: occasional along main road for c. 130 km southwards, 1992 (*Beentje*).

CULTIVATED. Mozambique: Hort. Maputo, May 1971 (fr.), *Balsinhas* 1849 (K). Mauritius: Hort. Mauritius, anno 1880 (seed), *anonymus* s.n. (K, syntype). India: Hort. Madras, anno 1900, *Bourne* s.n. (K). Sri Lanka: Hort. Peradeniya, July 1986 (y.fr.), *Rutherford & Bandara* R-100 (K). Thailand: Khao Chong, Nov. 1990 (fl.), *Barford & Ueachirakan* 41.432 (K). Singapore: Hort. Singapore, Oct. 1929 (fl.), *Furtado* s.n. (K). Indonesia: Hort. Bogor, May 1936 (fr.), *Furtado* s.n. (K).

23. DYPISIS DECARYI

The famous ‘Triangle Palm’ is widespread in cultivation, and is grown in a wide variety of climates; this is unlike its native status, where it is restricted to a very narrow habitat ‘niche’, and as a result has a very restricted distribution. The name refers to the collector of the type, Raymond Decary.

DISTRIBUTION. S Madagascar, confined to a small area.

HABITAT. Dry forest or bush on stony soil, mid slope; 80–600 m.

NATURAL HISTORY. J. Ratsirarson (pers. comm.) has observed both Black Parrot and *Lemur catta* feeding on the fruit mesocarp; he also found pig droppings full of seed of *D. decaryi*; he observed bees and flies visiting the flowers at anthesis.

LOCAL NAMES. *Laafa* (Ranopiso).

USES. Leaf used for thatching; fruits eaten by children, and formerly used to prepare a fermented drink; seeds exported for horticultural use, as the species is a prized ornamental.

CONSERVATION STATUS. Vulnerable. Only known from a small area, where nearly all seed is harvested for export; fires are a threat. Population estimated at a thousand. This species is listed on CITES Annexe II.

Dypsis decaryi (Jum.) *Beentje & J. Dransf.* **comb. nov.**

SYNONYM:

Neodypsis decaryi Jum., Ann. Inst. Bot.-Géol. Colon. Marseille sér. 5, 1 (1): 15 (1933); Jum., Cat. Pl. Madagascar, Palmae: 17 (1938); Jum. & H. Perrier, Fl. Madagascar 30: 148, fig. 41 (1945); Read, Principes 5: 71, fig. 42, 43 (1961). Syntypes: Madagascar, Fort Dauphin–Bevilany, *Humbert & Swingle* 5715 (syntype P; isosyntype TAN); Bevilany, *Decary* 10294 (Syntype P) & 10299 (Syntype P); without loc., *Perrier* 18654 (not seen).



Dypsis decaryi, growing in transitional forest at Andohahela.

Solitary palm. **TRUNK** (0.5–) 3–6 (–10) m high, 30–40 cm diam.; internodes 3–10 cm, grey. **LEAVES** tristichous, 18–24, 1.5–3.25 m, porrect, arched, twisted around the rachis, marcescent; sheath open, 30–45 cm long, 40–65 cm wide when flattened, yellow-green with dense white wax usually overlaid by thick reddish pubescence, with ligules 7 cm high, 10 cm wide, orange turning grey-brown; petiole 33–50 cm long, proximally 6–7.5 × 9–10 cm diam., distally 5 × 5 cm, channelled with sharp margins, abaxially with reddish pubescence but glabrescent; rachis 2.2–3 m long, densely pubescent but glabrescent, channelled proximally, in mid-leaf 2–3 × 1.3–2.3 cm and keeled; leaflets 55–97 on each side of the rachis, regular, glaucous, at an angle of 90° with the leaflets on the opposite side of the rachis, the proximal 80–140 × 0.5–1 cm, (the most proximal often with reins and pendulous), median 58–89 × 2–3.5 cm (interval 2–5 cm), distal 10–60 × 0.4–1.6 cm, the top pair not or hardly connate, one or two tuft(s) of long brown-red ramenta present on the proximal part of the abaxial midrib, and lines of scattered minute reddish scales present on the fainter veins, main vein 1, very prominent adaxially, as well as thickened margins, apex unequal, bifid in median leaflets. **INFLORESCENCE** interfoliar, 125–178 × 120 cm, widely spreading, branched to 3 orders; peduncle 50–58 cm long, with scattered scales, proximally c. 5 × 3 cm diam., distally c. 3.5 × 2 cm diam.; prophyll 25–63 cm long, borne at 8–12 cm above the base of the peduncle,



**Dypsis
decaryi**

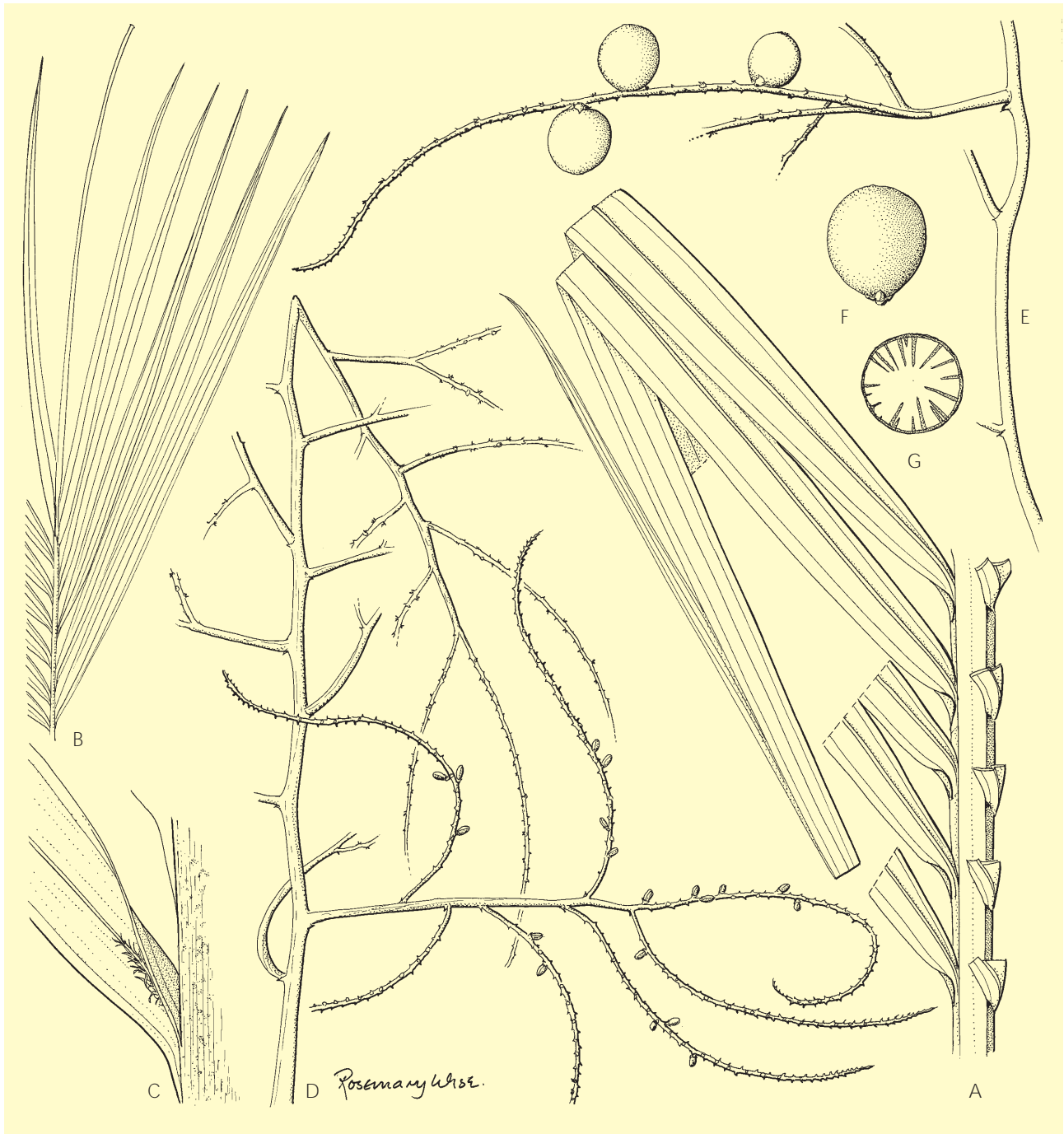
erect, hooded, split for 90% with only the proximal part closed, with scattered scales; peduncular bract inserted at 18–20 cm from the base of the peduncle, 40–55 cm long, open over most of its length but closed and beaked for the distal 5–19 cm, with scattered scales; rachis c. 118 cm, with all axes flaking and densely scaly, with 20–26 branched and c. 18 unbranched first order branches, these proximally flattened, their base up to 7 × 5 mm; most proximal first order branches with their rachis up to 50 cm long and up to 22 second order branches (8 of these branched again); rachillae pale yellow-green, 12–26 cm long, 1–4 mm diam.; triads, distant, slightly sunken, with small yellowish flowers. **STAMINATE FLOWERS** with sepals 1.7–2.1 × 1.6–2 mm, concave, keeled and proximally gibbous, elliptic, rounded, entire; petals on a 1.2–1.5 mm high receptacle, 3.2–3.5 × 1.8–2.3 mm, elliptic, fleshy, acute; stamens 6, very slightly biseriata, with the antepetalous stamens inserted slightly higher than the antesepalous ones, filaments 2.4–3 mm long, thin, anthers 1.7–2 × 1 mm, dorsifixed, versatile, held horizontally at anthesis, the locules parallel and obtuse; pistillode cylindrical, c. 1.6 mm high and 1 mm diam. **PISTILLATE FLOWERS** unknown, but from fruiting material sepals 2.4–2.8 × 2.6–3.3 mm, broadly ovate with a small apiculum; petals c. 3.3 × 4.3 mm, with broad membranous wings and a small fleshy triangular apex; staminodes c. 1 mm high. **FRUIT** ovoid, later subglobose, 15–22 × 12–19 mm, with rounded apex;



Dypsis decaryi. Close-up of crown, Andohahela (Photo: B. Du Puy & D. Du Puy).



Dypsis decaryi. Detail of infructescence (Photo: B. Du Puy & D. Du Puy).



Dypsis decaryi. **A** mid section of leaf $\times 1/3$; **B** leaf tip $\times 1/3$; **C** undersurface of leaflet base $\times 1$; **D** first order inflorescence branch $\times 1/3$; **E** part of infructescence $\times 1/2$; **F** fruit $\times 1$; **G** seed in cross section $\times 1$. **A - D** from *Dransfield et al.* JD6772, **E - G** from *Beentje & Andriampaniry* 4614. Drawn by Rosemary Wise.

mesocarp fleshy-fibrous, endocarp fibrous with anastomosing fibres. **SEED** subglobose to ellipsoid, 17–19 \times 15–17 mm, slightly asymmetric with an apiculate base (1 mm), with shallow anastomosing grooves over its surface, with rounded apex, and an equatorial depression corresponding to the embryo; endosperm ruminant, with ruminations up to 6 mm deep.

NOTE. Quite similar to *D. madagascariensis* but altogether neater in appearance, with its more compact habit and the densely three-ranked leaves.

SPECIMENS SEEN. Tolanaro: Bevilany, Sept. 1928 (fl.), *Humbert & Swingle* 5715 (syntype; P, TAN); idem, Aug. 1932 (fl.), *Decary*

10294 (syntype; P) and (fl.), *Decary* 10296 (P), and (fl., fr.), *Decary* 10299 (syntype; P); Andohahela parc. 3, Dec. 1989 (fr.), *Dransfield et al.* JD6772 (K, TAN); Ranopiso, March 1992 (fl., fr.), *Beentje & Andriampaniry* 4614 (K, MO, TAN).

LOCALITY UNCLEAR (but most likely from the same small area as the above): Col d'Ambato and E slopes of Vohipaly, 400–600 m alt., Feb. 1934 (fl., fr.), *Humbert* 14155 (P).

CULTIVATED: Ambovombe, Oct. 1931 (fl.), *Decary* 9303 (K, P); near Lutheran Hospital at Manambaro, Feb. 1975 (fl., y.fr.), *Croat* 31918 (TAN).