FRUIT only known from carbonized remnants, c. 14 x 10.5 mm, possibly with fibrous endocarp, possibly with ruminate endosperm.

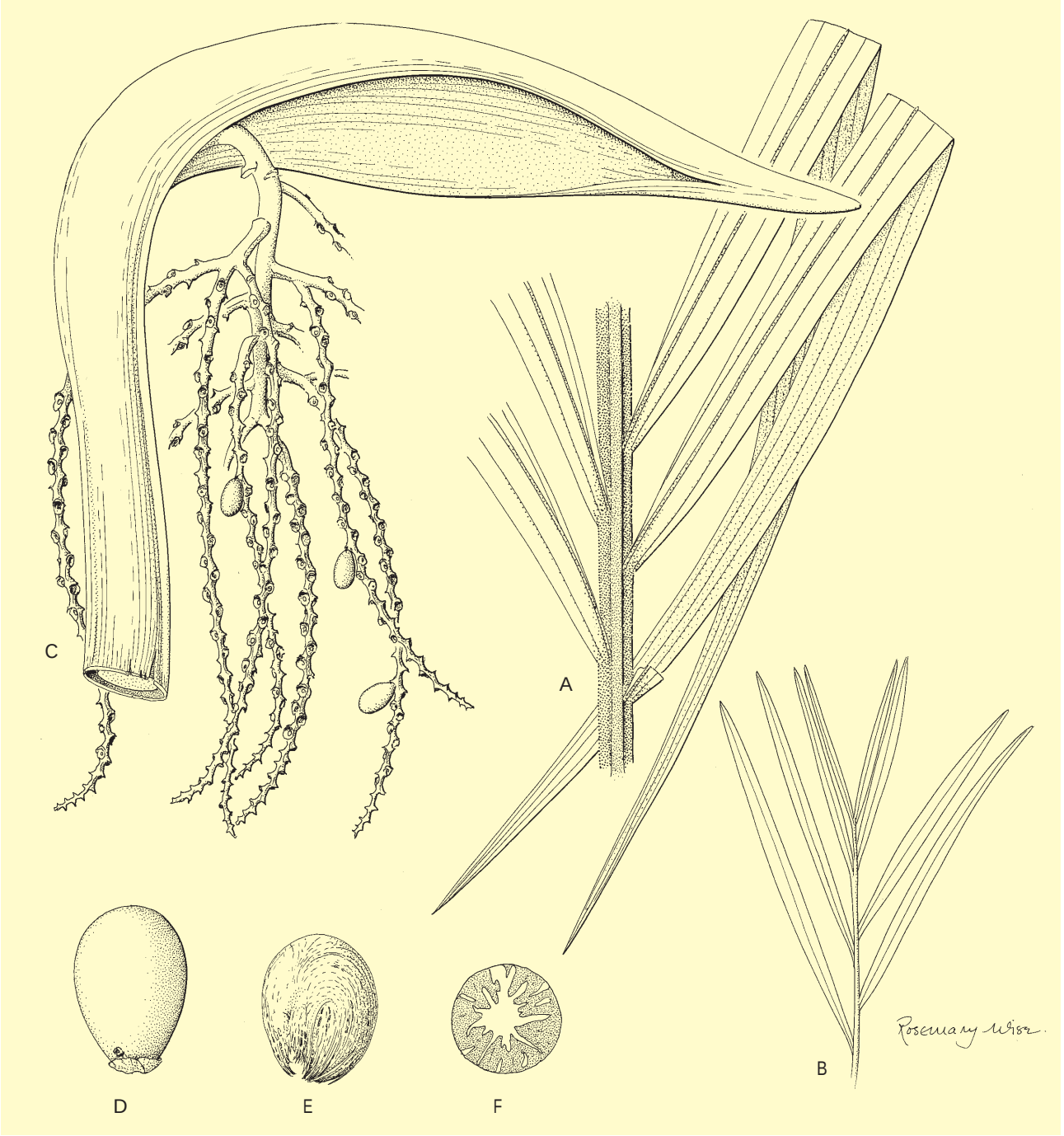
NOTE. With its grouped leaflets and glabrous inflorescences branched to 2 orders, this species is allied to *D. oreophila* and *D. tsaratananensis*, from which it is easily distinguishable by its larger leaf sheaths, longer leaves with larger leaflets, the much longer inflorescences, and the larger fruit.

SPECIMENS SEEN. Ambositra: 8km NNW of Ilaka Afovoany, July 1992 (fl.), *Beentje & Andriampaniry* 4742 (BH, K, MO, P, TAN; type); 45km S of Ambositra, March 1992 (old fr.), *Beentje & Andriampaniry* 4615 (K).

27. DYPSIS HETEROMORPHA

This palm has not been collected since 1959, and the material available to us was fairly fragmentary. A high altitude species, with the name indicating the variation in the leaf division: from regularly pinnate with many leaflets, to entire-leaved on young shoots.

DISTRIBUTION. N Madagascar: Tsaratanana, Marojejy and Anjanaharibe.
HABITAT. Moist montane forest; 1300–2200 m.
LOCAL NAMES. Not recorded.



Dypsis heteromorpha. **A** mid section of leaf x 1/2; **B** leaf tip x 1/4; **C** infructescence x 1/2; **D** fruit x 1; **E** fibrous endocarp x 1; **F** seed in cross section x 1. **A**, **B** from *Humbert & Saboureau* 31725, **C – F** from *Humbert et al.* 24766. Drawn by Rosemary Wise.

Dypsis heteromorpha

USES. Not recorded.
CONSERVATION STATUS. Uncertain, but probably rare; the distribution area is not well known botanically.

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

SYNONYM:
Neodypsis heteromorphus Jum., Ann. Inst. Bot.-Géol. Colon. Marseille sér. 4, 2 (2): 20 (1924); Jum., Cat. Pl. Madagascar, Palmae: 18 (1938); Jum. & H. Perrier, Fl. Madagascar 30: 145 (1945). Syntypes: Madagascar, Tsaratanana, *Perrier* 11935 (not seen); 15266 (Syntype P); 15266bis (Syntype P).

Clustering palm in tufts of 3–6, but sometimes appearing solitary. **STEMS** 3–12 m high, 8–12 cm diam.; internodes green, nodal scars obvious. **LEAVES** c. 10 in the crown, tristichous (fide *Humbert & Saboureau* 31725); sheath 27–50 cm long, to 7 cm wide when flattened, with sloping shoulders, adaxially red-brown, abaxially very waxy, in the distal part with dense reddish laciniate scales; petiole absent or up to 35 cm long, 1–1.8 cm diam., densely pubescent or with scattered scales; rachis c. 1.5 m long, in mid-leaf 0.9–1.3 cm wide, slightly keeled, pubescent on both surfaces; leaflets (number unknown) regular, the proximal 20–62 x 0.2–2.5 cm, median 41–67 x 1–3.5 cm (interval 1.5–3.5 cm), distal 7–35 x 0.6–2.5 cm, main veins 1–5, and with thickened margins, abaxially with scattered reddish glands on the minor veins and continuous or scattered laciniate ramenta 3–20 mm long on the midrib, apex bifid, unequally attenuate, young shoots with entire, deeply bilobed leaves 26–50 cm long with a costa 2–4 cm and lobes 24–46 cm long, or leaves with 2–4 leaflets (not seen), on a 64–75 cm long petiole. **INFLORESCENCE** infrafoliar, branched to 2 orders, pendulous; peduncle 20–40 (+) cm long, proximally 2–3.5 x 0.8–1.3 cm, distally 1–2 x 0.7–1.2 cm, glabrous; prophyll 38–52 x 3–8.5 cm, borne at 9–20 cm above the base of the peduncle, open for a third or over its whole length, erect, with scattered scales; peduncular bract inserted at 17–29 cm from the base of the peduncle, 27–55 (+) cm long, open over its whole length, beaked for 0.5–4 cm, with scattered scales; non-tubular peduncular bracts one or two, 2–5 cm long; rachis 10–35 cm long, glabrous, with 8–10 branched and 7–9 unbranched first order branches, first order branches with a rachis 1.5–13 cm long and 1.1–1.7 x 0.5–0.8 cm diam. proximally with 3–9 rachillae; rachis bracts conspicuous, to 2.5 cm, pale brown; rachillae 5–23 cm long, 2–4 mm diam., with dense triads (more distant in fruit), superficial or slightly sunk, with triangular acute rachilla bracts and very pronounced bracteoles. **STAMINATE FLOWERS** with sepals 2.7–3.2 x 3.5–4.4 mm; petals 3.5–3.8 x 2.5–3 mm; stamens 6, slightly 2-seriate (offset 0.2 mm), filaments in ripe buds 1.8–2.1 mm, cylindrical, anthers 2.2–2.4 x 0.9–1.2 mm; pistillode c. 2.4 mm high, 1.2 mm diam. **PISTILLATE FLOWERS** with sepals 3–4 x 3.3–5mm; petals (at young bud stage) 3.6–3.8 x c. 3.5 mm, very concave (4–5.5 x 5–7.2 mm in young fruit); staminodes not seen; gynoecium when young c. 3 mm high, 1.8 mm diam. **FRUIT** ellipsoid, 17–23 x 14–22 mm, rounded at the apex; endocarp fibrous, the fibres anastomosing. **SEED** ellipsoid, 16–22 x 13–21 mm, obtuse at the base with a sub-aequatorial depression, rounded at apex, with slight surface grooving; endosperm ruminate, the ruminations distant and 1–7 mm deep. **EOPHYLL** bifid.

NOTE. Related to *D. baronii* and *D. onilahensis*, and possibly a high-altitude variant of the former; distinct by deep-ruminate endosperm.

SPECIMENS SEEN. Andapa / Ambilobe / Bealanana: Mt Tsaratanana, Oct. 1912 (y.fr.), *Perrier* 11935 (P); idem, Jan. 1923 (fr.), *Perrier* 15266 (P, syntype); idem, sine die (fl., fr.), *Perrier* 15266 bis (P, syntype). Bealanana: Ambohimirahavavy Mts, Jan./Feb. 1951 (fr.), *Humbert & Capuron* 25281 (K, P). Andapa: N Anjanaharibe, Dec. 1950/Jan. 1951 (fr.), *Humbert et al.* 24766 (K, P); Ambatoharanana valley to upper Antsahaberoka, Nov./Dec. 1959 (y.fr.), *Humbert & Saboureau* 31725 (K, P).

28. DYPSIS BARONII

A common species of the rain forest of the eastern escarpments. It closely resembles *D. lutescens*, but that is strictly a littoral species, confined to a narrow strip of vegetation close to the sea; and *D. onilahensis*, from drier localities on the Western side of the island. *D. baronii* is a graceful palm, and is often seen in the gardens of central Madagascar, particularly in Antananarivo. This is such a fine ornamental that it should be much more widely grown outside Madagascar than it is at present, particularly in view of its occurrence in upland areas. The species was named after the Reverend Richard Baron (1847–1907) who collected the type and many other plants in 1880–1897.

DISTRIBUTION. North, Central and E Madagascar.
HABITAT. Moist montane forests, bamboo-dominated forests; usually on steep mid-slopes, less often on ridge crests; survives in half-shade or full sun; 850–1470 m.
LOCAL NAMES. *Farihazo* (Imerina, “sugarcane tree”); *Tongalo* (Betsimisaraka).
USES. Excellent palm-heart; fruit edible and sweet. Very elegant palm, cultivated in Antananarivo and on the plateau as an ornamental.
CONSERVATION STATUS. Not threatened. The species occurs over a large area.

Dypsis baronii *(Becc.) Beentje & J. Dransf.* **comb. nov.**

SYNONYMS:
Chrysalidocarpus baronii Becc., Bot. Jahrb. Syst. 38, Beibl. 287: 33 (1906); Becc., Palme del Madagascar 39, fig. 30, t. 37 (1914); Jum.,

Dypsis baronii, perched on cliff edge, Marojejy (*Dransfield et al.* JD6769).