



Dypsis lanceolata
(x: sight records)

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

SYNONYM:

Chrysalidocarpus lanceolatus Beccari, Bot. Jahrb. Syst. 38, Beibl. 87: 34 (1906); Jum. & H. Perrier, Fl. Madagascar 30: 97 (1945). Type: Comoros, Combani Forest, *Humboldt* 1347 (Holotype P, isotype K).

Clustering palm. **STEMS** 5–6 m high; nodal scars pronounced. **LEAVES** “somewhat plumose” (*Hull*); petiole distally 1.5–1.7 cm diam., reddish pubescent on both surfaces, channelled; rachis 1.8–1.9 m long, in mid-leaf 1–1.6 cm wide, keeled, densely scaly or with scattered pale scales; leaflets slightly irregular (interval in mid-leaf 1.5–5 cm), proximal 38–43 × 1–2.7 cm, median 30–48 × 3.5–7 cm, distal 4–24 × 0.7–3.8 cm, main veins 3–5, with very conspicuous thickened margins, with several large (0.5–1 cm long) pale-coloured lacinate ramenta on midrib and main veins proximally, and faint minute reddish scales in longitudinal lines on the main and minor veins on the type, but absent in modern collections, acuminate. **INFLORESCENCE** branched to 3 orders or more, c. 60 cm long; rachis bract (one seen) 4.5 cm long, narrowly triangular; rachillae 13–24 cm long, 1.5–3 mm diam., glabrous, with distant superficial triads. **STAMINATE FLOWERS** with sepals 1.2–1.4 × 1.4–1.6 mm; petals connate for 0.5 mm, free for 2.6–2.9 × 1.4–1.6 mm, spreading at full anthesis; stamens 6, uniseriate, filaments 1 (in closed flowers)–3 (in fully open flowers) mm long, narrowly cylindrical, anthers 1.4 × 0.5–0.6 mm; pistillode 1.6–1.7 mm high, 0.4–0.6 mm diam. **PISTILLATE FLOWERS** not seen. **FRUIT** ellipsoid, 13–17 × 6–10 mm, with rounded apex; endocarp fibrous, with anastomizing fibres. **SEED** slightly obovoid with obtuse apex, (10–) 13–16 × 5–7 mm, with homogeneous endosperm.

NOTE. Affinities of this taxon are unclear.

SPECIMENS SEEN. Grande Comore: Combani forest, Oct. 1884 (fl.), *Humboldt* 1347 (K, P; type); Mt Kartala, above Boboni, Oct. 1993 (fr.), *Hull* s.n. (K). Moheli: Mt St. Antonio, Dec. 1967 (fr.), *Bernardi* 11750 (K, P).

SIGHT RECORDS. Anjouan: Mt Ntingui, around Lac Dzilandzei (*Hull*).

CULTIVATED. Hull reports that this species is cultivated at the Galawa Beach hotel at the N end of Grande Comore.

40. DYP SIS PUMILA

A species from high mountains in the north; the specific name means ‘dwarf’, and refers to the habit: in this case short and stocky rather than the ‘tiny’ it often means. This species holds the altitude record for Madagascar palms as it occurs at a higher elevation than any other.

DISTRIBUTION. NE Madagascar, only known from the Marojejy Mts.

HABITAT. On gneiss and quartzite, in ericoid vegetation or montane forest, also in high altitude swamp; 1500–2100 m.

LOCAL NAMES. Not recorded.

USES. Not recorded.

CONSERVATION STATUS. Vulnerable. Only known from a single locality, which is protected. Not collected in recent years.

Dypsis pumila *Beentje* **sp. nov.**

Palma nana monticola si caespitosa *D. heteromorphae* affinis sed multo brevior vagina folii minima foliis minoribus inflorescentiis semel ramificantibus, si solitaria *D. acuminum* affinis sed endospermio ruminato vagina folii minima differt. Typus: Madagascar, Marojejy summit, *Cours* 3576 (Holotypus P; isotypi K, TAN).

Dwarf palm 0.3–1 m, apparently solitary. **STEM** erect or procumbent, 2.2–7 cm diam., internodes 2–5 mm distally. **LEAVES** 3–4 per crown; sheath 11–19 cm long, c. 2 cm diam., waxy and distally densely scaly, without auricles but with square shoulders; petiole absent or up to 4 cm, 7–11 × 4–8 mm diam., densely scaly; rachis



Dypsis pumila



Dypsis pumila. **A** habit $\times 1/5$; **B** inflorescence $\times 1/2$; **C** detail of rachilla $\times 3$; **D** fruit $\times 2$; **E** seed $\times 2$; **F** seed in cross section $\times 2$. **A, B, D - F** from *Humbert & Cours* 23799, **C** from *Cours* 3576. Drawn by Margaret Tebbis.

26–47 cm, densely scaly; leaflets regular, 19–21 on each side of the rachis, the proximal 11–18 \times 0.3–1.2 cm, median 13–20 \times 1–2.1 cm (interval 0.8–2 cm), distal 2.5–9 \times 0.2–1 cm, apices attenuate, not bifid, main vein 1–3, as well as thickened margins, few to many small scales on midrib and margins abaxially, with a few scales on the proximal midrib adaxially. **INFLORESCENCE** infrafoliar, branching to 1 order; peduncle 7–16 cm, 4–8 mm diam.; prophyll dark green, 17–24 cm long, borne at 2.8–8 cm above the base of the peduncle, 3–3.5 cm wide, the distal half open; peduncular bract inserted at 4.5–12.2 cm, 10–15 \times 3.6 cm, open, with scattered small scales; rachis 3–5 cm long, glabrous, with 9 rachillae (always?); rachillae 6–10 cm long, 1.5–3 mm diam., glabrous, the triads distant, sunk in pits; rachilla bracts acute, entire. **STAMINATE FLOWERS** with sepals 2.3–3.9 \times 1.8–3.2 mm, ovate or elliptic, proximally slightly gibbous, keeled, with membranous margins,

acute or obtuse, entire; receptacle 1.8–2 mm high; petals 3–5.8 \times 2.6–3.6 mm, ovate or elliptic, striate, acute; stamens 6, uni- or biseriate, filaments 2.8–5 \times 0.7–1 mm, flat, anthers 1.4–1.8 \times 0.8–1 mm, dorsifixed, versatile, the locules slightly diverging proximally, obtuse; pistillode c. 1.8–3 \times 0.7–1 mm. **PISTILLATE FLOWERS** with sepals 2.6–3.2 \times 1.7–3.3 mm (to 4.7 mm wide in fruit), (broadly) ovate, concave, acute; petals (in bud) imbricate with a minute valvate apex, broadly ovate, 2.2–2.8 \times 1.8–2.2 mm, or (in fruit) white and reddish, 4.2–4.8 \times 5–5.5 mm; staminodes (four seen) flat, up to 0.6 mm high; gynoecium c. 2.2 \times 1.5 mm. **FRUIT** subglobose to slightly obovoid, 17–26 \times 12–20 mm, pointed at the base, rounded at the apex; endocarp fibrous, but not adhering to the seed. **SEED** slightly obovoid, 16–17 \times 13–14 mm, pointed at the base, rounded at the apex, with a faint subequatorial depression; endosperm ruminant with many intrusions, 2–6 mm deep.

NOTE. This species is near *D. heteromorphus* but is solitary, much shorter, has a shorter sheath, smaller leaves, and the inflorescence branches to only one order; it is also near *D. acuminum* but is distinct by its ruminant endosperm and shorter sheath.

SPECIMENS SEEN. Marojejy E peak, Dec. 1948 (dead infl.), *Humbert* 22756 (K, P); idem, March 1949 (fl., fr.), *Humbert* 23679 (K, P); idem, March/April 1949 (fr.), *Humbert & Cours* 23799 (K, P); Marojejy summit, April 1949 (fl.), *Cours* 3576 (K, P, TAN); Marojejy, without further loc., 1900 m, Nov. 1972 (?), *Guillaumet* 4059 (TAN).

41. DYPsis TSARATANANENSIS

A rare clustering palm from a montane habitat. The name refers to the type locality, Tsaratanana.

DISTRIBUTION. Only known from Mt Tsaratanana.

HABITAT. 1000–1700 m.

LOCAL NAMES. *Kindro* (Antankarana).

USES. Palm-heart edible and highly esteemed.

CONSERVATION STATUS. Uncertain. Not seen for more than seventy years, but this mountain has not been



Dypsis tsaratananensis. A leaf sheath, petiole and basal leaflets $\times 1/5$; B mid section of leaf $\times 1/5$; C leaf tip $\times 1/5$; D part of inflorescence $\times 1/4$; E detail of rachilla $\times 5$; F fruit $\times 2.5$; G fruit in cross section $\times 2.5$. All from *Perrier* 15265. Drawn by Margaret Tebbs.