



**Dypsis
occidentalis**



**Dypsis
montana**

Nov./Dec. 1948 (bud), *Humbert & Capuron* 22173 (P); Ambatoharanana Valley to upper Antsahaberoka R., Nov./Dec. 1959 (fl.), *Humbert & Saboureaux* 31703b (P); Anjanaharibe W of Beamalona, June 1992 (bud), *Beentje & Andriampaniry* 4684 (K).

84. DYP SIS MONTANA

A rare small palm from the high mountains (hence the name). This species slightly resembles *D. occidentalis*, which occurs in the same area.

DISTRIBUTION. Tsaratanana.

HABITAT. Montane forest; c. 1500 m.

LOCAL NAMES. Not recorded.

USES. Not recorded.

CONSERVATION STATUS. Unclear. Known from a single site only, but the Tsaratanana is not well known botanically.

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

SYNONYM:

Neophloga montana Jum., Ann. Inst. Bot.-Géol. Colon. Marseille sér. 4, 6 (3): 29 (1929); Cat. Pl. Madagascar, Palmae: 21 (1938); Jum. & H. Perrier, Fl. Madagascar 30: 70 (1945). Type: Madagascar, Tsaratanana, *Perrier* 15646 (Holotype P).

Clustering palm to 1 m tall. **STEMS** < 4 mm diam. **LEAVES** c. 5 in the crown; leaf sheath 7–9 cm long, proximally glabrous, distally with patches of reddish indument, with small triangular auricles 2–5 mm high; petiole 2.5–5 cm long, c. 2 mm diam., with scattered scales; rachis 16–27 cm long, in mid-leaf c. 2 mm wide, with scattered scales; leaflets 3–5 on each side of the rachis, the proximal 10–13 × 0.9–2 cm, median 11–16 × 1.5–2.4 cm, distal pair forming a flabellum 16–22 cm long, connate for 7–8 cm, leaflet interval 1–3 cm, but usually with a large gap just below the terminal flabellum, with scattered scales on the abaxial surface,

main veins 1, to 7 on the terminal flabellum. **INFLORESCENCE** interfoliar, unbranched; peduncle 23–27 cm long, densely scaly; prophyll 10–12 cm long, 3–5 mm wide, open only near the apex; peduncular bract inserted at 4.5–13 cm from the base of the peduncle, 7.5–15 cm long, split in the distal 5–9 cm; rachilla 10–14 cm long, 1–2 mm diam., densely stellate-puberulous, with distant triads. **STAMINATE FLOWERS** with sepals 0.5–0.7 × 0.4–0.6 mm; petals 1–2 × 0.5–1.2 mm; stamens 6, equal, the filaments c. 0.5–0.8 mm long, flattened, anthers 0.6–0.7 × 0.4–0.6 mm, dorsifixed; pistillode 0.7–0.9 × 0.2–0.3 mm, slender and conical. **PISTILLATE FLOWERS** with sepals 0.5–0.7 × 0.6–0.7 mm; petals 2–2.2 × 1.4–1.5 mm; staminodes c. 0.2 mm; gynoeceium c. 1.6–1.7 × 1.4–1.7 mm. **FRUIT** unknown. (Plate: see next page).

SPECIMENS SEEN. ?Ambanja: Tsaratanana, Dec. 1922 (fl.), *Perrier* 15646 (Holotype P); idem, S. Andohanitrema, May 1993 (bud), *Malcomber & Hemingway* 2471 (K).

85. DYP SIS BERNIERANA

A charming little palm, quite distinct by its leaf shape and open leaf sheaths. The name refers to the collector of the type, Bernier, about whom very little is known, except that he was French and collected in Madagascar around 1834.

DISTRIBUTION. Masoala Peninsula and down the coast to Vatomandry.

HABITAT. Lowland to submontane rain forest, steep slope; 100–1200 m.

LOCAL NAMES. *Ambosa* (Betsimisaraka, *vide* Bernier).

USES. Not recorded.

CONSERVATION STATUS. Vulnerable. This seems to be a rare species, and all over its distribution area the vegetation is under threat from fragmentation and agricultural conversion.



Dypsis montana. **A** crown $\times 2/5$; **B** detail of rachilla $\times 3$. All from *Malcomber & Hemingway* 2471. Drawn by Margaret Tebbis.

Dypsis bernierana (Baill.) Beentje & J. Dransf. **comb. nov.**

SYNONYMS:

Haplophloga bernierana Baill., Bull. Soc. Linn. Paris 148: 1171 (1894). Type: Madagascar, Titinga, *Bernier* 41a (Holotype P).

Neophloga bernierana (Baill.) Becc., Bot. Jahrb. Syst. 38, Beibl. 87: 25 (1906); *Palme del Madagascar* 27, fig. 20, t. 26 (1912); Jum., Ann. Inst. Bot.-Géol. Colon. Marseille sér. 4, 6 (3): 18 (1929); *Cat. Pl. Madagascar, Palmae*: 19 (1938); Jum. & H. Perrier, *Fl. Madagascar* 30: 64 (1945).

Solitary dwarf palm. **STEM** to 1 m tall, 6–8 mm diam. distally; internodes 2–10 mm, brown; nodal scars c. 2 mm. **LEAVES** entire, bifid; sheath 3.5–7 cm, open, with scattered scales (denser distally), with fibrous margins; petiole 2–21 cm, 1–1.5 mm diam., with scattered scales; lamina entire, 17–26 cm long, shiny dark green;

midrib 5–7.5 cm, lobes 12–19 \times 2.3–3.5 cm, main veins 5–6, with scattered scales on the major and minor veins in young leaves, but glabrescent, apex narrowly dentate with 2–3 teeth, sometimes looking acute. **INFLORESCENCE** unbranched; peduncle 10–16 cm long, blackish with dense pubescence; prophyll 4–12.5 cm long; peduncular bract apex to 10–20 cm from the base of the peduncle (insertion point not known); rachilla 5–15 cm long, 1–2 mm diam., with scattered reddish scales; triads distant. **STAMINATE FLOWERS** with sepals 1.2–1.9 \times 1.4–1.8 mm, ciliolate, dotted; petals 1.6–2.8 \times 1.2–1.6 mm; stamens 6, uniseriate, filaments 0.5–1.3 mm, connate for 0.2 mm, anthers 1.3–1.5 \times 0.4–0.5 mm, versatile; pistillode 0.8–1.2 \times 0.2–0.3 mm. **PISTILLATE FLOWERS** with sepals 2–2.4 \times 1.5–1.8 mm, ciliolate, slightly keeled; petals 2.6–2.8 \times 1.3–1.4 mm; staminodes c. 0.4 mm; gynoeceum c. 2.3 \times 0.8 mm. **FRUIT** red, ellipsoid, 6–13 \times 4–5 mm; endocarp fibrous, with almost free fibres. **SEED** with homogeneous endosperm.



Dypsis bernierana, growing in forest undergrowth on the Masoala Peninsula (*Dransfield et al. JD6364*).



Dypsis bernierana. Close-up of fruit (*Dransfield et al. JD6364*).



**Dypsis
bernierana**

NOTE. It is probably most closely related to *D. digitata*. The leaf lobes are usually distinctly hooded at their tips.

SPECIMENS SEEN. Maroantsetra: Hiaraka, Oct. 1986 (fl.), *Dransfield et al.* JD6364 (K, P, TAN); without precise locality, May 1975 (y.fr.), *Morat* 4930 (P). Soanierana-Ivongo: Titinga, anno 1834 (fl., y.fr.), *Bernier* 41a (Holotype P). Vatomandry: Mt Takarandonia, Nov. 1927 (fl.), *Perrier* 14124 (P). Locality uncertain ("sentier plus loin que la chute, 1200 m"), Jan. 1945 (fl.), *Cours* 2479 (K, P).

86. DYPsis POIVREANA

A small solitary undergrowth species from littoral forest, distinct by its entire, deeply lobed leaves and long unbranched inflorescence. The name refers to the collector of the type, Pierre Poivre (1719–1786).

DISTRIBUTION. Coastal strip around Fenoarivo.

HABITAT. Littoral forest (fide Guillaumet). The type of *D. poivreana* has the description 'palmier aquatique' which seems unlikely.

LOCAL NAMES. *Hovoka* (fide Baron).

USES. Not recorded.



Dypsis bernierana. **A** crown showing inflorescences $\times 1/2$; **B** detail of rachilla in fruit $\times 1$. All from *Cours* 2479. Drawn by Rosemary Wise.