

83. DYP SIS OCCIDENTALIS

A clustering undergrowth palm with pinnate leaves and a long, unbranched inflorescence. *Occidentalis* is Latin for 'western', a name which probably comes from the type locality in the protologue - which we believe is faulty.

DISTRIBUTION. Tsaratanana, Anjanaharibe and Marojejy massifs.

HABITAT. Montane or submontane forest; 450–1400 m.

LOCAL NAMES. None recorded.

USES. None recorded.

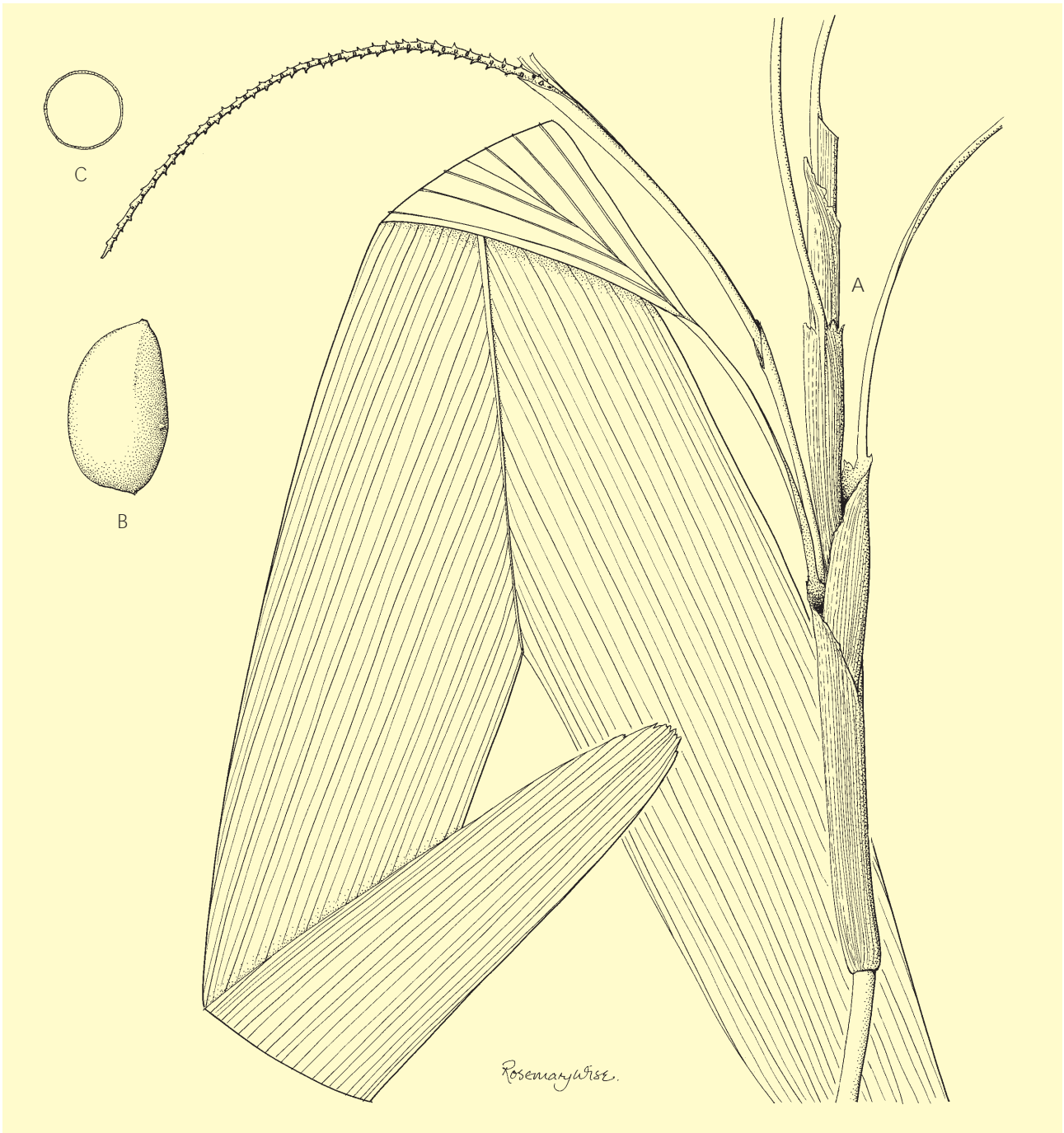
CONSERVATION STATUS. Uncertain. These mountains are not well known botanically.

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

SYNONYM:

Neophloga occidentalis Jum., Ann. Inst. Bot.-Géol. Colon. Marseille sér. 4, 6 (3): 24 (1929); Cat. Pl. Madagascar, Palmae: 21 (1938); Jum. & H. Perrier, Fl. Madagascar 30: 68 (1945). Type: Madagascar, Tsaratanana, Perrier 12040 (Holotype P).

Clustering palm in tufts of 6–8. **STEMS** 0.5–2 m high and 7–8 mm diam. **LEAVES** 5–8 in the crown, pinnate; sheath 8–14 cm long, with scattered scales to densely pubescent, and 5 mm long triangular auricles; petiole absent or to 5 cm long, 2–4 mm wide, with scattered scales; rachis 29–40 cm long, in mid-leaf to 3 mm wide, with scattered scales; leaflets 4–13 on each side of the



***Dypsis andapae*.** **A** crown showing leaf and inflorescence $\times 3/5$; **B** mature fruit $\times 2$; **C** mature fruit in section $\times 2$. All from Beentje & Andriampaniry 4680. Drawn by Rosemary Wise.



Dypsis occidentalis. **A** crown $\times 1/8$; **B** detail of rachilla $\times 3$; **C** fruit $\times 3$; **D** fruit in cross section $\times 3$. **A** reconstructed from *Humbert* 31703 and *Perrier* 12040, **B** – **D** from *Decary* 14709. Drawn by Margaret Tebbs.

rachis, \pm regular (with few leaflets) to grouped (when more leaflets are present), sigmoid, the proximal $9\text{--}27 \times 0.2\text{--}1$ cm, median $15\text{--}30 \times 1\text{--}5$ cm, distal $13\text{--}21 \times 1.9\text{--}3.5$ cm, the distal pair joined for $2\text{--}5$ cm, main veins 1, rarely a 2–4-fold leaflet with 3–4 veins, with scattered scales on the minor veins, apices acuminate, the terminal pair dentate over a width of 1–2 cm. **INFLORESCENCE** unbranched, erect; peduncle 22–40 cm long, 1–3.5 mm diam., ?glabrous or minutely puberulous; prophyll 12–23 cm long, 3–9 mm wide, open for 1–7 cm, with scattered scales; peduncular bract inserted at 10–15 cm from the base of the peduncle, 9–31 cm long, open in the distal part and tattering, with a beak of up to 6 mm; rachilla 15–31 cm long, 1–2.5 mm diam., glabrous or minutely puberulous, the triads distant. **STAMINATE FLOWERS** (in bud) with sepals $0.7\text{--}0.9 \times 0.6\text{--}1$ mm; petals $1.1\text{--}1.4 \times 0.6$ mm; stamens 6, ?1-seriate, the filaments $0.4\text{--}0.7$ mm and thin, anthers $0.5\text{--}0.7 \times 0.2\text{--}0.3$ mm; pistillode not seen. **PISTILLATE**

FLOWERS with sepals $0.6\text{--}1.3 \times 0.6\text{--}1$ mm; petals $1.3\text{--}1.8 \times 0.8\text{--}1$ mm; staminodes $0.3\text{--}0.4$ mm high; gynoeceium $0.8\text{--}1 \times 0.3\text{--}0.6$ mm. **FRUIT** reddish-orange, ellipsoid, $9\text{--}10 \times 4\text{--}5$ mm.

NOTE. The protologue of *N. occidentalis* declares that the type specimen comes from the W slopes of Tsaratanana; we read Perriers handwriting on the label of the type as N, as it does not remotely resemble an O (for Ouest).

SPECIMENS SEEN. Ambilobe/Iharana: between Iharana (Vohemar) and Ambilobe, July 1939 (fr.), *Decary* 14709 (P). ?Ambanja, Tsaratanana Mt. area, N side, Nov. 1912 (bud), *Perrier* 12040 (Holotype P). Andapa: NE Marojejy, E of Ambalamanasy II,



**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. DYPISIS 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. DYPISIS 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.