

4–4.5 × 3–5 mm, hooded, orbicular with minute acute apex; staminodes 0.8–1.3 mm, flat and narrow; ovary c. 3.5 × 4.5 mm, asymmetrical, the stigmas slightly lateral and 1.3 mm high. **FRUIT** 8 × 7–10 mm; endocarp with anastomosing fibres. **SEED** transversely ellipsoid, broader in one plane than in the other, 6.5 × 5.5 × 8–9 mm, with homogeneous endosperm. **EOPHYLL** bifid.

NOTE. This species is rather close to *D. nauseosa* but distinct by its small fruit with homogeneous endosperm.

SPECIMENS SEEN. Ifanadiana: 34km E of Ifanadiana, July 1992 (fl., fr.) *Beentje & Beentje* 4729 (Holotype K; isotypes MO, TAN).

SIGHT RECORD. This species has been observed by HB at Ambinanindrano and Andranomaitso.

15. DYP SIS LASTELLIANA

This is a very elegant species, now widespread in cultivation. The densely red-brown hairy crownshaft is particularly ornamental. In cultivation it seems to require warmer and moister conditions than *D. leptocheilos*. The name refers to the collector of the type, de Lastellé.

DISTRIBUTION. NW, NE and E Madagascar.

HABITAT. Moist lowland forest on slopes (gneiss, quartz, granite), often rather open or near forest mar-



Dypsis lastelliana. **A** portion of leaf sheath × 1/3; **B** petiole and basal leaflets × 1/3; **C** mid section of leaf × 1/3; **D** leaf tip × 1/3; **E** peduncular bract × 1/12; **F** part of inflorescence × 1/5; **G** fruit × 2/3; **H** fruit in cross section × 2/3. All from *Dransfield et al.* JD6359. Drawn by Margaret Tebbis.

gins, or near water, in ravines, also in coastal forest on white sand; 1–450 m.

LOCAL NAMES. *Menavozona* (Betsimisaraka, meaning Red Neck, referring to the leaf sheath), *Sira* or *Ravintsira* (Betsimisaraka, meaning Salt or Salt Leaf, referring to the former practice of making salt from the pith).

USES. Pith formerly used to make salt; palm-heart bitter, inedible, said to be poisonous by the Sakalava and Tsimihety.

CONSERVATION STATUS. Not threatened. Seems to be fairly widespread, over a wide altitude range.

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

SYNONYM:

Neodypsis lastelliana Baill., Bull. Soc. Linn. Paris 148: 1172 (1894); Becc., Bot. Jahrb. Syst. 38, Beibl. 87: 38 (1906), as *lastelleana*; Becc., Palme del Madagascar 5, fig. 2, t. 3 (1912), as *lastelleana*; Jum. & H. Perrier, Ann. Inst. Bot.-Géol. Colon. Marseille sér. 3, 1 (1): 12, fig. 5, t. 2–3 (1913), as *lastelleana*; Jum., Ann. Inst. Bot.-Géol. Colon. Marseille sér. 4, 2 (2): 16 (1924); Jum., Cat. Pl. Madagascar, Palmae: 18 (1938); Jum. & H. Perrier, Fl. Madagascar 30: 150, fig. 42 (1945). Type: Madagascar, without precise location, *de Lastellé* anno 1841 (Holotype P).

Solitary palm. **TRUNK** 5–15 m tall, 18–25 cm diam., with swollen base; wood hard; internodes 8–10 cm, pale green to grey waxy green, nodal scars c. 4 cm, pale brown; crownshaft 70–75 cm tall, rich velvet red-brown. **LEAVES** 9–15 in the crown, spirally inserted; sheath 40–60 cm long, partially open, adaxially brilliant cherry-red, abaxially densely red-brown pubescent; petiole 0–10 cm long, proximally to 11 × 3.5 cm, distally c. 6 × 3.7 cm, channelled; rachis yellowish, to 3.8 m long, in mid-leaf 1.2–2.2 × 1.5–1.6 cm diam. and here either channelled or keeled, glabrous, sometimes waxy; leaflets (50–) 94–102 on each side of the rachis, regular, somewhat pendulous, the proximal 39–66 × 0.7–2 cm, median 56–89 × 2.4–4.3 cm, distal 18–54 × 0.4–2.3 cm, with a few tufts of lacinate ramenta on the proximal part of the abaxial midrib, but otherwise glabrous, main veins 1, prominent adaxially, as well as margins thickened, apices bifid and acute. **INFLORESCENCE** interfoliar, branched to 3 orders, spreading, 1.3–2.2 × 1.2 m; peduncle 60–96 cm long, distally 2.5–3.2 × 1.7–1.5 cm; prophyll 30–52 × 6.5–11 cm, borne at 3–13 cm above the base of the peduncle, rusty pubescent; peduncular bract deciduous, inserted at c. 30 cm from the base of the peduncle, 80–110 cm long, c. 12 cm wide when flat, splitting along its length but for the upper c. 28 cm, with a beak of up to 7 cm long, densely reddish pubescent; rachis c. 97 cm long, yellow-green, sometimes tinged red, with 13–17 branched and c. 10 unbranched first order branches, the proximal of these with a rachis 2.5–3.5 × 1–1.3 cm diam. at the base, to 45 cm long, and with up to 15 second order branches; rachis bracts up to 3 cm long, triangular and acute; rachillae pale or yellow-green, 27–47 cm long, 3–6 mm diam., glabrous, with dense, slightly sunken triads. **STAMINATE FLOWERS** only known from rather young buds, with sepals 2–2.3 × 1.4–2.3 mm, keeled, slightly gibbous, concave, with membranous wings, truncate or nearly so; receptacle 0.2–0.6 mm high; petals 1.7–2.7 × 1.3–1.6 mm, ovate, acute; stamens 6, very slightly biserrate, the antepetalous stamens inserted slightly higher up, filaments 0.5–0.6 mm and thin-cylindrical, anthers 1.3–1.6 × 0.5–0.7 mm, the locules parallel and obtuse; pistillode c. 2.2 × 0.6 mm. **PISTILLATE FLOWERS** with sepals 1.7–2.4 × 2.2–2.6 mm; petals 2.4–2.8 × 1.8–2.4 mm; staminodes c. 0.5–0.6 mm high; gynoecium c. 2.5 × 1 mm. **FRUIT** obovoid with a narrowed base, slightly asymmetrical, 18–24 × 12–17 mm, with obtuse apex; endocarp fibrous, with anastomosing fibres. **SEED** 12–21 × 10.5–16 mm, the base apiculate with a small depression just above the apiculus, this



Dypsis lastelliana

corresponding to the position of the embryo, the apex rounded; endosperm deeply ruminant, the intrusions many and 2–4 mm deep. **SEEDLING** with two scale leaves, the distal one densely scaly; eophyll pinnate, with petiole scaly with reddish and silvery scales; leaflets of eophyll 4–6 on each side of the rachis.

NOTE. The type consists of a partial inflorescence with staminate and pistillate buds, but there is no doubt that it is conspecific with the other cited material; *Miller & Randrianasolo* 4491 is at the same stage of development and is an almost exact match.

Baillon mentions another de Lastellé specimen in the protologue, this one with fruits, and states this probably belongs to another species. The fruit has homogeneous endosperm. Beccari (1906, l.c.) describes the proper fruit of *D. lastelliana* from a Baron collection, and identified the fruiting specimen of de Lastellé as *Chrysalidocarpus piluliferus* (= *D. pilulifera*).

SPECIMENS SEEN. Ambanja: Manongarivo Mts, Ambalafary, Feb. 1992 (fr., seedling), *Beentje & Zo Lalaina* 4580 (K, MO, TAN). Sambava: near Maroambihy, March 1949 (bud, old seed), *Humbert* 23391 (K, P). Andapa: Mt Beondroka, (fl.), *Miller & Randrianasolo* 4491 (K, MO, TAN). Maroantsetra: Maroantsetra, Oct. 1986 (ster.), *Dransfield et al.* JD6358 (K, TAN) and (bud) 6359 (K, P, TAN). Mananara Avaratra: Antanambe, Oct 1991 (dead infl.), *Beentje* 4452 (K, TAN). Soanierana-Ivongo: Soanierana, Sept. 1912 (old infl.), *Perrier* 12023 (P); E of Antasibe (Andasibe), Dec. 1938 (bud, fr.), *Lam & Meeuse* 5863 (K, L).

WITHOUT PRECISE LOCALITY: NE Madagascar, no date (fr. only), *Razafindratsira* s.n. (K). Central Madagascar, circa 1883 (fr.), *Baron* 2322 (K); without locality, anno 1841 (bud), *de Lastellé* s.n. (P, type); idem, circa 1912 (fl., y.fr.), *Perrier* 12080 (P).

SIGHT RECORD. Sainte-Marie: Kalalao forest (*Dransfield*, 1994).

SIMILAR SPECIMENS. *Beentje et al.* 4575 from the Manongarivo (altitude 785 m) is similar in most respects, but has grouped leaflets and rachillae 46–55 cm long. As there are no flowers or fruits we cannot describe it as a new taxon.

Dypsis lastelliana, remaining after forest clearance, Sahavary.