



**Dypsis
humbertii**

USES. Not recorded.

CONSERVATION STATUS. Unknown. Not seen for over sixty years.

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

SYNONYM:

Neophloga humbertii Jum., Ann. Inst. Bot.-Géol. Colon. Marseille sér. 5, 1 (1): 20 (1933); Jum., Cat. Pl. Madagascar, Palmae: 21 (1938); Jum. & H. Perrier, Fl. Madagascar 30: 90 (1945). Type: Madagascar, Manantantely forest, *Humbert* 5817 (Holotype P).

Palm 2–3 m, very slender. **LEAVES** 4 or more in the crown; sheath c. 6.6 cm, with oblique opening, with minute auricles to 2 mm high, red-brown, with scattered scales; petiole 5–6 cm long, c. 2 mm diam., with scattered scales; rachis 17–18 cm long, c. 2 mm diam., with scattered scales; leaflets 2–5 on each side of the rachis, in 2 sub-opposite groups distant for 2.8–5 cm, proximal 8–9 × 0.7–1 cm, median 10–13 × 0.9–1.2 cm, the top pair forming a flabellum 12.5–14 × 9 cm, connate for 4.5–5.5 cm, the lobes 8–9 × 2.5–2.6 cm, proximal leaflets with 1 main vein, acuminate, distal leaflets with 6 main veins, the apices truncate and dentate, also the distal outer margins dentate, all leaflets glabrous or with a few scattered scales proximally. **INFLORESCENCE** c. 34 cm, branched to 2 orders; peduncle c. 19 cm long, distally 1.5–2 mm diam., with scattered scales; prophyll 13–16 × 0.3 cm, with scattered scales, open for the distal 5 cm or near the apex only; peduncular bract deciduous, inserted at 9 cm from the base of the peduncle; rachis c. 10 cm, with scattered scales, with c. 2 branched and 10 unbranched first order branches, the proximal with 2 rachillae each; rachillae 5.5–8 cm long, 1 mm diam., minutely puberulous but glabrescent, with distant superficial triads. **STAMINATE FLOWERS** with sepals 0.5–0.6 × 0.7–1 mm; petals 1.8–2.1 × 1.2–1.3 mm, striate; stamens 6, slightly biseriolate (offset 0.25 mm), filaments 1–1.3 mm long, the base slightly triangular, the distal part thin, anthers 1–1.3 × 0.4–0.5 mm, dorsifixed, versatile, the locules parallel and acute; pistillode 0.8–0.9 × 0.3–0.4 mm. **PISTILLATE FLOWERS** unknown. **FRUIT** unknown.

NOTE. Very close to *D. commersoniana* and possibly not distinct.

SPECIMENS SEEN. Tolanaro: Manantantely forest, Sept. 1928 (fl.), *Humbert* 5817 (Holotype P).

49. DYP SIS SCOTTIANA

A very distinct species from the white sand forest of southern Madagascar, with elegant, slender inflorescences with short rachillae. This species would probably do very well as an ornamental; not only is it beautiful, but its habitat indicates it would tolerate fairly dry climates, probably along the lines of *D. lutescens*. The name refers to the collector of the type, George Francis Scott Elliot (1862–1934) who collected in Madagascar between 1888 and 1890.

DISTRIBUTION. SE Madagascar.

HABITAT. Forest on white sand, heath scrub on white sand, once found in lowland rain forest; 10–515 m.

LOCAL NAMES. *Raosy* (Antanosy).

USES. Not recorded.

CONSERVATION STATUS. Vulnerable. Distribution area small, in a specialized habitat which is under threat of mining operations and fire. Numbers are estimated at less than five hundred.

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



Dypsis scottiana, growing in coastal forest north of Tolanaro.

SYNONYMS:

Neophloga scottiana (Becc.) Becc., Bot. Jahrb. Syst. 38, Beibl. 87: 22 (1906); Becc., Palme del Madagascar 22, fig. 15, t. 20 (1912); Jum., Cat. Pl. Madagascar, Palmae: 22 (1938); Jum. & H. Perrier, Fl. Madagascar 30: 91 (1945).

Phloga scottiana Becc., J. Linn. Soc. 29: 61 (1891); Baill., Bull. Soc. Lin. Paris 150: 1195 (1894). Type: Madagascar, forest near Fort Dauphin (Tolanaro), *Scott Elliot* 2615 (Holotype K).

Neophloga affinis Becc., Bot. Jahrb. Syst. 38, Beibl. 87: 22 (1906); Becc., Palme del Madagascar 21 (1912); Jum., Cat. Pl. Madagascar, Palmae: 19 (1938); Jum. & H. Perrier, Fl. Madagascar 30: 91 (1945). Type: Madagascar, Fort Dauphin (Tolanaro), *Cloisel* 108 (Holotype P), **synon. nov.**

Clustering palm in tufts of 3–16. **STEMS** 2–4 m tall, 0.6–2 cm diam.; internodes 1–5 cm, pale grey, nodal scars 2–3 mm, slightly stepped.

LEAVES 4–7 in the crown, correct to spreading; sheath 8–31 cm long, 0.8–2 cm diam., 2/3 closed in outermost leaves, light brown with dense red scales, glabrescent but distally always with some patches of scales, with small triangular auricles up to 2 mm high; petiole 4–30 cm long, 0.2–0.5 × 0.2–0.3 mm diam., adaxially flat or slightly channelled, abaxially convex, with scattered scales, proximally often with a raised triangular continuation of the inner sheath lining; rachis 15–66 cm long, in mid-leaf 1–4 mm wide, with scattered scales on both surfaces; leaflets 11–27 on each side of the rachis, in groups of 2–8 (regular or nearly so in *Decary* 10729), interval between the groups 2.5–8 cm, interval between the leaflets 0.5–2 cm, the proximal 7–22 × 0.3–0.8 cm, median 8–24 × 0.6–2 cm, distal 6–15 × 0.4–2.7 cm, proximal and median with cuneate base, 1–3 main veins (prominent adaxially), and acuminate apex, glabrous or with a few scattered scales near the base and on the margins, the distal pair joined for 0.4–3.5 cm, with 3 main veins, narrow and dentate at the apex. **INFLORESCENCE** interfoliar to infrafoliar,



Dypsis scottiana. **A** leaf and inflorescence × 1/2; **B** part of infructescence × 1/3; **C** fruit × 2.5; **D** fruit in cross section × 2. All from *Beentje & Andriampaniry* 4599. Drawn by Rosemary Wise.



erect to spreading to semi-pendulous, branched to (2) 3 (4) orders, 25–55 cm long; peduncle 12–25 cm long, proximally 3–6 mm diam. and flattened, distally 1.6–5 mm diam. and cylindrical, densely scaly but glabrescent; prophyll 14–26 cm long, borne at 2–3.5 cm above the base of the peduncle, up to 1.3 cm wide, pale brown with scattered scales, opening near the apex only; peduncular bract quickly deciduous, inserted at 7–14 cm from the base of the peduncle, 15–19 cm long, split in its distal half except for the distal 1–2 cm, with a narrow beak of 0.5–1 cm, pale brown with scattered scales; rarely with a small (1.5 mm) non-tubular peduncular bract in the distal part of the peduncle; rachis 7–40 cm long, scaly, with 7–27 branched and 0–10 unbranched first order branches, the proximal ones near their base 1.5–3 mm diam. and hardly flattened; rachillae 0.7–6.5 cm long, c. 1 mm diam., sparsely scaly, with distant superficial triads, with green to cream flowers. **STAMINATE FLOWERS** with sepals 0.5–0.8 × 0.8–1 mm, keeled, gibbous at the base, broadly ovate, rounded; petals on a 0.4 mm high receptacle, 1.4–1.8 × 1.4–1.6 mm, ovate to elliptic, acute, opening only slightly; stamens 6, at anthesis poking through the slits in the corolla, with the anthers held vertically, their openings upward, slightly 2-seriate, the antepetalous filaments with small swellings at the base and inserted slightly higher than the antepetalous ones, 1.2–1.5 mm long, thin, anthers 1.2–1.3 × 0.4–0.5 mm, dorsifixed, versatile, the locules parallel and obtuse; pistillode 0.7–0.8 mm high, ellipsoid, 0.5–0.6 mm diam. **PISTILLATE FLOWERS** with sepals 0.8–1.1 × 1.2–1.8 mm, broadly ovate, rounded, concave; petals proximally imbricate and broadly ovate, distally triangular, fleshy and acute, 2–2.3 × 1.6–2.2 mm; staminodes 6, 0.3–0.5 mm, dentiform, flat; gynoeceum 2.4–2.6 × 2–2.2 mm, asymmetrically gibbous. **FRUIT** red, ellipsoid, 6–11 × 3.5–6.5 mm, with slightly pointed apex; mesocarp fleshy, c. 1 mm thick; endocarp fibrous with free fibres. **SEED** ellipsoid, 6.5–9 × 3–5 mm, obtuse to pointed at both ends; endosperm homogeneous. **EOPHYLL** bifid.

NOTE. *N. affinis* was described by Beccari based on an inflorescence collected by Cloisel (called Choisel by Beccari), which resembles that of *N. scottiana* closely. Beccari distinguished the species by the branching of the inflorescence: *N. scottiana* branched to two orders, *N. affinis* branched to three orders. However, the type of *N. scottiana* is clearly branched to three

orders, and we hereby put *N. affinis* into the synonymy of *D. scottiana*.

Jumelle mentions the two species only briefly in his 1929 revision of *Neophloga*, since he did not believe the two taxa belonged to the genus. Not hampered by the fact that he had not seen the type of *N. scottiana*, he based his opinion on the description by Beccari (to whom he usually refers to as ‘the Italian botanist’). In the Flora (Jumelle & Perrier 1945) the species are treated under *Neophloga*, with the brief remark that they are intermediate between *Neophloga* and *Chrysalidocarpus*.

A collection from lowland rain forest (*Beentje* 4599) matches the collections from white sand forest and heath scrub at much lower altitudes; the main differences are the higher number of leaflets (up to 27 on each side of the rachis, rather than the 11–19 of the white sand populations) and the slightly longer petiole. The inflorescence agrees perfectly, however, and we see no reason to distinguish the forms formally. A collection from Manombo Forest, much further north, looks similar to *D. scottiana*, but with the following differences: leaf sheath 6.5–9.5 cm long; **LEAFLETS** 7–11 on each side of the rachis; inflorescence branched to 2 orders; prophyll and peduncular bract slightly shorter; rachis with 1–5 branched and 8–9 unbranched first order branches; **STAMINATE FLOWERS** with sepals 0.7–1.2 mm. Other characters overlap [Farafangana: Manombo, Jan. 1993 (fl.), *Beentje & Andriampaniry* 4782 (K, MO, P, TAN)]. It is not the same, but is verging towards it!

SPECIMENS SEEN. Tolanaro: forest near Fort Dauphin (Tolanaro), May 1890 (fl.), *Scott Elliot* 2615 (Holotype K); between Pic St. Louis and the sea, 1928 (fl.), *Humbert* 5958 (P); 13 km N of Ezoambo, March 1992 (fr.), *Beentje & Andriampaniry* 4599 (K, MO, TAN); 24 km N of Tolanaro, April 1989 (ster.), *Rabevohitra et al.* 1932 (K, P); idem, March 1992 (fl.), *Beentje & Andriampaniry* 4607 (BH, K, MO, P, TAN) and (fl., fr.), *Beentje & Andriampaniry* 4608 (BH, K, MO, P, TAN); St. Luce forest, March 1992 (fl., fr.), *Phillipson et al.* 3961 (K); idem, Dec. 1992 (fl.), *Beentje* 4759 (K, MO, P, TAN); L. Mananivo–Andriamanga, March 1989 (fl.), *Dumetz et al.* 616 (K, P); NW Marokoky, March 1989 (y.fr.), *Dumetz et al.* 618 (K, P, TAN); Mandena, March 1989 (fl., fr.), *Dumetz et al.* 503 (MO); idem, (fl.), *Dumetz et al.* 527 (K, P); idem, April 1989 (bud, fr.), *Rabevohitra et al.* 1888 (K, P). Fort Dauphin (Tolanaro), without further locality, without date (fl.), *Cloisel* 108 (P, type of *N. affinis*); idem, Oct. 1932 (fl., fr.), *Decary* 10729 (K, P, TAN).

50. DYPISIS SINGULARIS

A handsome small palm, sadly on its way to extinction. The name indicates that it is a peculiar taxon (due to the didymous stamens on a palm of this habit), as well as the fact that it is known from a single collection from only one site. Nevertheless, it is a distinct species.

DISTRIBUTION. Only known from Manombo forest.

HABITAT. Lowland rain forest; slope base; c. 45 m.

LOCAL NAMES. Not recorded.