

bud, cylindrical and fat (0.6 mm diam.), anthers 1.8–2 × 0.8–1 mm, versatile; pistillode c. 1.3 × 0.6–0.9 mm. **PISTILLATE FLOWERS** with sepals 1.3–2.5 × 1.7–3.5 mm; petals 2.7–4.6 × 2.5–5 mm; staminodes six, 0.2–0.6 mm; gynoecium (in bud) c. 2.5 × 0.8 mm. **FRUIT** pale yellow-green, ellipsoid to slightly obovoid, 22–25 × 14–18 mm, the apex rounded, pustulate; endocarp with densely anastomosing fibres. **SEED** slightly obovoid, 18–20 × 13–16 mm, with pointed base and rounded apex; endosperm ruminant, the intrusions dense, 2–5 mm deep.

**NOTE.** At first we thought this litter-accumulating palm belonged in a group with the other litter-collectors, such as *D. perrieri*. But the structure of the inflorescence indicates it is closer to taxa such as *D. madagascariensis*, *D. coursii* and *D. rivularis*.

**SPECIMENS SEEN.** Andapa: Marojejy W, Ambatoharanana valley to upper Antsahaberoka R, Nov./Dec. 1959 (y.fr.), *Humbert & Saboureaux* 31702 (K, P); Marojejy E, NW of Mandena, Feb. 1989 (fr.), *Miller & Lowry* 4185 (K, MO); idem, N of Mandena, Oct. 1988 (bud), *Miller* 3509 (K, MO, P); idem, Nov. 1989 (fl., y.fr.), *Dransfield et al.* JD6755 (Holotype K; isotype TAN).

#### 47. DYPISIS COMMERSONIANA

A little known species from the southern lowland rain forests. The name refers to the collector of the type, Philibert Commerson (1727–1773), who collected in Madagascar in 1770–1771.

**DISTRIBUTION.** SE Madagascar.

**HABITAT.** Lowland rain forest; c. 120 m.

**LOCAL NAMES.** Not recorded.

**USES.** Not recorded.

**CONSERVATION STATUS.** Critical. The distribution area is small, and under severe pressure by an expanding population. Nearly all lowland rain forest in the area has now been cleared.

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

**SYNONYMS:**

*Neophloga commersoniana* Baill., *Hist. Plantes* 13: 372 (1895); Becc., *Bot. Jahrb. Syst.* 38, *Beibl.* 87: 22 (1906); Becc., *Palme del Madagascar* 20, fig. 13, t. 18 (1912); Jum., *Cat. Pl. Madagascar, Palmae*: 19 (1938); Jum. & H. Perrier, *Fl. Madagascar* 30: 90 (1945). Type: Madagascar, without locality, *Commerson* s.n. (Holotype P).

*Neophloga pygmaea* Pic.-Serm., *Webbia* 11: 149 (1956), **synon. nov.** See **NOTE**.

Clustering palm. **STEMS** 1.8–5 m tall. **LEAVES** irregularly pinnate; sheaths only known from their distal part, with rounded shoulders and a few scattered scales; petiole 5–21 cm long, 2.5–3 mm diam., flat adaxially, with dense minute reddish scales; rachis 21–38 cm long, in mid-leaf 2–2.5 mm wide, with dense to scattered scales; leaflets in groups of 2 or irregular, 4–7 on each side of the rachis (interval 2–9 cm), distally sigmoid, proximal 5–23 × 0.4–1.6 cm, median 11–28 × 1.3–2.5 cm, cuneate at the base, acuminate, the distal leaflets often praemorse-denticulate on the distal lower margin, glabrous, top pair forming a deeply lobed flabellum 15–33 cm long, connate for 6–11 cm, the lobes 12–23 × 3.4–5 cm, with denticulate-praemorse apices 2–4 cm wide and with the teeth continuing along the distal margin, and 6–7 main veins, leaflets glabrous except for the very base. **INFLORESCENCE** interfoliar, branched to 2 orders; peduncle c. 24 cm long outside the sheath, compressed, 2.5–6 mm wide distally, with rather dense minute reddish scales;

prophyll c. 15 cm long outside the sheath, opening only in the distal 1–3 cm, with scattered scales; peduncular bract inserted at 12 cm above the sheath apex, c. 13 × 0.6 cm, with scattered scales, split over its length, deciduous; rachis 20–33 cm long, with 6–11 branched and 10–13 unbranched first order branches, the proximal with a rachis to 8 cm and up to 7 rachillae; rachis bracts up to 4 × 2.5 mm; rachillae 3–14 cm long, 0.5–1 mm diam., minutely puberulous; triads rather distant, superficial; rachilla bract concave, apiculate. **STAMINATE FLOWERS** with sepals 0.5–0.7 × 0.7–1 mm, keeled and gibbous, orbicular, rounded; petals 1.2–1.8 × 0.9–1.2 mm, elliptic, acute, striate; stamens 6, slightly biseriate (0.2 mm offset, the inner higher), the filaments 0.4–1 mm long, thin, the anthers 0.8–1.3 × 0.3–0.5 mm, dorsifixed, versatile, with parallel acute locules; ovary rudiment with wide base, distally subtrigonous-pyramidal, 0.6–0.8 × 0.2–0.3 mm. **PISTILLATE FLOWERS** with sepals 0.5–0.6 × 0.5–1 mm; petals 2–2.4 × 1.8–2.3 mm; staminodes 6, minute; gynoecium when young to 1 mm high. **FRUIT** only known when young, up to 9 × 3 mm, with rather pointed apex.

**NOTE.** Baillon (1894b) described only the genus *Neophloga*, without giving a specific name; he cites the specimen *Commerson* s.n., “palmula microcarpa caudice sesquipedala” from Madagascar, and his genus description leaves no doubt that he is describing a true member of the *Dypsidinae*. Baillon states that Martius saw this plant, and thought it identical to *Hyophorbe indica* Gaertn. Baillon also states that it is distinct from *Hyophorbe*, closer to, but different from, *Dypsis* and distinct from *Areca lutescens* of Bory (which was, again, a *Hyophorbe*). We have seen the Commerson type in Paris (which is annotated by both Baillon and Beccari), and we can confirm that the Baillon description was drawn up based on it.

In Baillon (1895) the genus description is repeated





**Dypsis commersoniana.** **A** distal part of leaf  $\times 1/2$ ; **B** part of inflorescence  $\times 1/2$ ; **C** detail of rachilla  $\times 3$ . All from *Commerson* s.n.  
 Drawn by Margaret Tebbs.

with a footnote mentioning the binomial *Neophloga commersoniana* H.Bn.; in its synonymy are mentioned *Hyophorbe commersoniana* Mart. and *H. indica* Mart.

The inclusion of these synonyms gave Pichi-Sermolli (1956) reason to believe that the name *Neophloga commersoniana* should be cited as "(Mart.) Baill." and that though the genus description was truly about *Neophloga*, the species mentioned was in reality a *Hyophorbe*. We believe this is erroneous. If Baillon based his genus description on the Commerson collection from Madagascar

("palmula microcarpa caudice sesquipedala"), then his naming this species *Neophloga commersoniana* in his 1895 work is logical. The fact that Baillon thought that *Hyophorbe commersoniana* of Martius was identical (which it was not), does not matter; the *Neophloga* description is based on true Dypsid material, and so is the name *Neophloga commersoniana* Baill.

Curiously enough, the species is not treated in Jumelle's 1929 revision of *Neophloga*; he mentions the species (p. 12) but fails to include it in his key, and there is no description; probably the lack of bracts

in the type made Jumelle hesitate about it being a *Neophloga* as he saw the genus. It is, however, treated in the Flora (Jumelle & Perrier 1945), but it might have been included by Perrier, who edited this volume after Jumelle's death.

Close to *D. humbertii* (which might be the same as this species) and *D. scottiana*, which is distinct by much shorter rachillae.

**SPECIMENS SEEN.** Tolanaro: Manantenina-Soavola, Nov. 1971 (fl.), *Guillaumet* 3901 (K, P); Lakandava, Jan. 1990 (y.fr.), *Rabevohitra* 2208 (P). Madagascar, without locality, without date, (fl.), *Commerson* s.n. (Holotype P); also without locality or date (bud), *Goudot* s.n. (P).

#### 48. DYP SIS HUMBERTII

This palm is probably identical to *D. commersoniana*, but more material needs to be collected in southern Madagascar to make certain. The name refers to the collector of the type (and many other excellent palm collections), later Director of the Musée National d'Histoire Naturelle in Paris, Henri Humbert (1887–1967).

**DISTRIBUTION.** SE Madagascar.

**HABITAT.** Forest; 60–300 m.

**LOCAL NAMES.** Not recorded.



**Dypsis humbertii.** **A** crown  $\times 1/2$ ; **B** open staminate flower  $\times 8$ . All from *Humbert* 5817. Drawn by Margaret Tebbs.