



**Dypsis
confusa**

length, with a beak of up to 1.5 cm, circumscissile; rachis 10–36 cm long, scaly, with 8–18 branched and 8–17 unbranched first order branches, the proximal with an axis of up to 8 cm long and with up to 11 second order branches; rachillae yellow to orange, 2.5–15 cm long, c. 1 mm diam., minutely scaly/puberulous to glabrous. **STAMINATE FLOWERS** with sepals 0.6–1 × 0.7–1.3 mm; petals 1.9–2.5 × 1.2–1.7 mm, orange; stamens 6, 1- to biseriate, filaments 0.9–1 mm, thin, anthers 1.1–1.4 × 0.6–0.7 mm, dorsifixed, not versatile; pistillode 0.6–0.8 × 0.3–0.5 mm. **PISTILLATE FLOWERS** with sepals 0.8–1 × 1.1–1.3 mm; petals 1.8–2.3 × 1.8–2.2 mm; staminodes 0.2–0.4 mm; pistil only seen as young fruit. **FRUIT** orange to red, ellipsoid with a pointed apex, 6–10 × 3–5 mm. **SEED** 3–5 × 2.5–3.5 mm, with homogeneous endosperm.

NOTE. Most of all this species reminds us of *D. scottiana* from which it differs in the leaflets with scattered scales abaxially, and the longer staminate petals; the rest is gradual: rachis, group interval, leaflets and rachillae are as long as, or slightly longer than specimens of *D. scottiana*. It also resembles *D. hiarakae*, from which it is only distinct by the length of the rachilla.

Moramanga: Mantady, Dec. 1991 (fl.), *Beentje & Andriampaniry* 4545 (K, TAN) keys out as this taxon, but looks quite different. It is clustering with overhanging stems; petiole 0.5–1 cm, leaflets 23–26 on each side of the rachis, almost regular, the median 13–16 × 0.9–1 cm; rachillae 10–13 cm. Similar are: Mandritsara/Andilamena: N of Andilamena, Nov. 1929 (bud), *Perrier* 15012 (P). Ambatondrazaka: Ambatondrazaka, Dec. 1944 (bud), *Homolle* 548 (K, P).

SPECIMENS SEEN. Maroantsetra: Hiarakaka, Oct. 1986 (dead infl.), *Dransfield et al.* JD6383 (K, TAN); Ambanizana, Oct. 1986 (fl.), *Dransfield et al.* JD6386 (K, TAN); idem, Feb. 1989 (fl.), *Schatz & Lowry* 2616 (K, TAN); Andronabe, Feb. 1992 (fl., y.fr.), *Zjhra & Hutcheon* 163 (K); Antalavia, Feb. 1988 (fl.), *Dransfield & Staniforth* JD6481 (Holotype K; isotypes MO, TAN). Mananara Avaratra: Antanambe, April 1992 (y.fr.), *Beentje et al.* 4627 (BH, K, MO, P, TAN). Toamasina: Ambodiriana, Dec. 1944 (bud), *Cours* 1904 (K, P, TAN).

75. DYP SIS SAHANOFENSIS

This was one of our mysteries, only known from the type (collected in 1911) with very fragmentary material and no description to speak of. Then, just before taking this book to press, we visited Mt Vatovavy, some 70 miles/100 kilometers from the type locality, and we collected a medium-sized palm which turned out to match the type material beautifully. This kind of discovery gives a real thrill!

DISTRIBUTION. E Madagascar; only known from the type and one recent collection.

HABITAT. Rain forest; 315–1400 m.

LOCAL NAMES. Not recorded.

USES. Not recorded.

CONSERVATION STATUS. Endangered. The forest on Vatovavy is not protected, except by local fady (taboos), and population numbers were low. If forest clearance in the area continues, the status will become Critical within a few years.



Dypsis sahanofensis, on the isolated hill, Vatovavy (*Beentje & Dransfield* 4835).

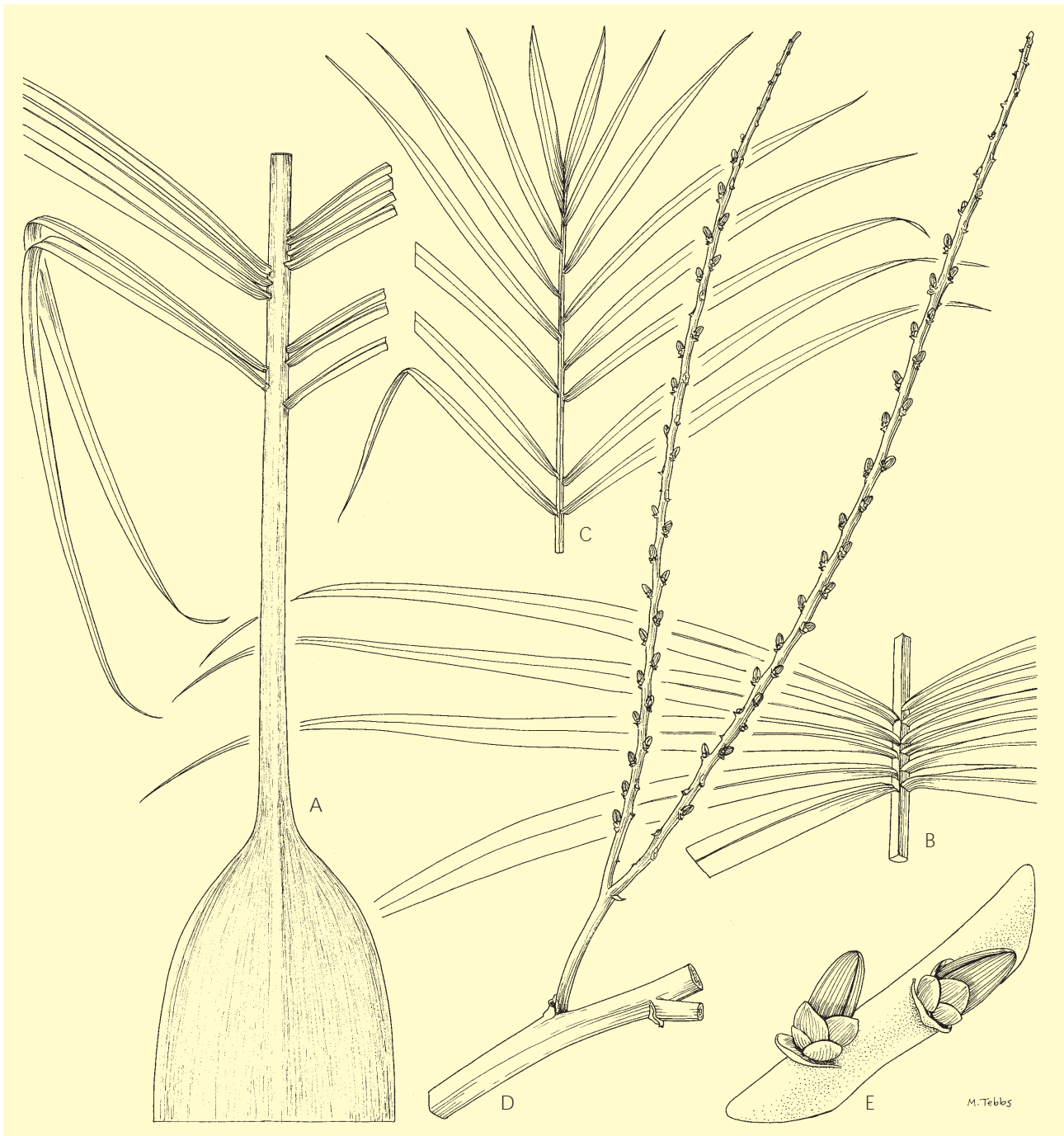
Dypsis sahanofensis (Jum. & H. Perrier) Beentje & J. Dransf. **comb. nov.**

SYNONYMS:

Chrysalidocarpus sahanofensis (Jum. & H. Perrier) Jum., Ann. Inst. Bot.-Géol. Colon. Marseille sér. 2, 10 (3): 6 (1922); Ann. Inst. Bot.-Géol. Colon. Marseille sér. 6, 3: 9 (1929); Cat. Pl. Madagascar, Palmae: 11 (1938); Jum. & H. Perrier, Fl. Madagascar 30: 110 (1945). **Neophloga sahanofensis** Jum. & H. Perrier, Ann. Inst. Bot.-Géol. Colon. Marseille sér. 3, 1 (1): 32, t. 15-16 (1913). Type: Madagascar, upper Sahanof R. basin, between Ambohimanga Atsimo and Ambositra, Perrier 12060 (Holotype P).

Clustering palm in groups of c. 12. **STEMS** 5-6 m long, 3 (-8, fide Perrier) cm diam.; internodes 12-13 cm long. **LEAVES** with sheath 20-31 cm long, with sloping shoulders, adaxially dark red-brown, abaxially pale green to mid-brown with some wax and orange-

brown caducous scattered scales; petiole 17-18 cm long, proximally c. 1.5 x 0.5 cm, distally c. 1.1 x 0.5 cm, densely scaly on both surfaces, convex on both surfaces with sharp margins; rachis c. 1 m long, in mid-leaf 0.5-0.7 cm wide, abaxially with scattered scales, adaxially with a few scales, slightly keeled; leaflets 23-24 on each side of the rachis, grouped to irregular and slightly fanned within the groups, in mid-leaf in groups of 3-5, the groups at intervals of 3-13 cm, the leaflets within the groups at intervals of 0.2-2.5 cm, proximal 26-33 x 0.6-1.4 cm, median 29-38 x 1.7-3 cm, distal 13-23 x 0.5-1.5 cm, glabrous or nearly so, main vein 1, apices attenuate. **INFLORESCENCE** interfoliar, branched to 2 orders; peduncle c. 43 cm, proximally 1.7 x 0.4 cm, distally 1.3 x 0.9 cm, densely reddish-scaly; prophyll 29-44 cm long, borne at 9-25 cm above the base of the peduncle, glabrous or nearly so; peduncular bract inserted at 20-33 cm from the base of the peduncle, c. 34 cm long, deciduous; non-tubular peduncular bract inserted at c. 27 cm from the base of the peduncle, 5 mm



Dypsis sahanofensis. **A** leaf sheath, petiole and basal leaflets x 2/5; **B** mid section of leaf x 2/5; **C** leaf tip x 2/5; **D** part of inflorescence x 2/5; **E** detail of rachilla x 3. All from Perrier 12060. Drawn by Rosemary Wise.



Dypsis sahanofensis

long; rachis c. 27 cm, puberulous, with c. 5 branched, and 11–16 unbranched first order branches, the proximal of these with a secondary rachis of up to 5 cm long and 7 × 2.5 mm diam. at base, with up to 3 rachillae; rachillae 19–33 cm long, 1–3.5 mm diam., puberulous, with very distant triads in pits with proud acute rachilla bracts. **STAMINATE FLOWERS** only seen in young bud: sepals to 1.5 × 1.3 mm, keeled and slightly hooded; petals still smaller than the sepals at this stage; stamens still less than 0.3 mm, but clearly 6, anthers probably versatile. **PISTILLATE FLOWERS** with sepals 2.6–3.2 × 2.5–3 mm; petals connate for 0.6–0.8 mm, free for 5.1–5.7 × 3–3.5 mm; staminodes 6, 0.8–1.2 mm long; ovary 5–5.3 × 2–2.2 mm. **FRUIT** not seen.

NOTE. The type at P consists of three sheets. Two sheets of *Perrier* 12049, *Neophloga littoralis*, (sheath and middle part of rachis) were originally excluded by us as not belonging to that taxon. In fact the two pieces not only match those of the type of *D. sahanofensis*, but fit parts of the rachis on the type sheet! There is no doubt that they are the same number; the sheath is figured in Jumelle & Perrier (1913).

SPECIMENS SEEN. Ambositra: upper Sahanofa basin between Ambohimanga du Sud and Ambositra, Nov. 1911 (fl.), *Perrier* 12060 (P; type). Mananjary: Vatovavy, Nov. 1994 (bud), *Beentje & Dransfield* 4835 (K, TAN).

76. DYP SIS ERIOSTACHYS

This handsome little palm, distinctive in its entire-bifid leaf and silky hairy inflorescence, is known only from low crown forest near the summit of the isolated peak of Mount Vatovavy, southwest of Mananjary. The forest on Vatovavy is home for several curious palms, such as *Dypsis basilonga*, *D. trapezoidea* and *D. angusta*. The lower parts of the hill have been largely cleared for shifting cultivation and parts of

the exposed northeastern face have at some time been partially destroyed by fire. Nevertheless much of the summit area is covered with fine forest that receives some degree of protection under local beliefs or *fady*. The species name is Greek for woolly spikes, referring to the hairy inflorescences.

DISTRIBUTION. Only known from Vatovavy.

HABITAT. Gentle slope in low canopy forest near summit of hill; 450 m.

LOCAL NAMES. Not recorded.

USES. Not recorded.

CONSERVATION STATUS. Endangered. Single site status; forest only protected by local custom.

Dypsis eriostachys *J. Dransf. sp. nov.*

habitu, statura, folio bifido et inflorescentia lanuginosa *D. lanuginosae* superficialiter similis, sed pagina inferiore folii ramentis elongatis, rachillis c. 30 (vice c. 100) pilis inflorescentis longioribus, non crispatis, floribus staminatis staminibus 6 differt. Typus: Madagascar, Mananjary, Vatovavy, *Dransfield et al.* JD7513 (Holotypus K; isotypi MO, P, TAN).

Slender solitary undergrowth palm to 1.5 m tall. **STEM** 9 mm diam., internodes 13–17 mm long, dark green with pale brown lines, with scattered dark brown caducous scales. **LEAVES** 10 in crown; sheath 8 × 1.7 cm, distally very densely covered with thick red-brown tomentum and scales; auricles ill defined; petiole 1–3 cm, 3 mm wide, densely grey or brown hairy; rachis 23–25 cm; blade entire bifid 32–37 cm long, gradually widening from the base to widest at the tip where 11–13 cm, the two lobes with a broad sinus, and shallowly to deeply lobed apically, adaxially shining, with very inconspicuous punctiform scales, abaxially with minute brown punctiform scales and scattered elongate brown ramenta along a few veins, emerging leaf tinged reddish. **INFLORESCENCE**



Dypsis eriostachys