

distal  $3-10 \times 0.8-3.2$  cm, connate for 1.2-3.2 cm, with 4 main veins, truncate and dentate for up to 4 cm. INFLORESCENCE interfoliar, erect, branched to 1 order (one unbranched in Perrier 17214); peduncle 12–26 cm long, 1.5–2 mm diam.,  $\pm$  glabrous; prophyll 10-17 cm long, to 3 mm wide, borne at up to 5 cm above the base of the peduncle, opening only near the apex, pale brown with scattered scales; peduncular bract inserted at 7-15 cm from the base of the peduncle, 6-11 cm long, opening only in the distal 2-3 cm, pale brown with scattered scales; second tubular peduncular bract often (always?) present at 12-20 cm from the base of the peduncle, 0.9-2.5 cm long, shortly tubular with a long acumen; non-tubular bract sometimes present near the rachis, 1.6 mm long; rachis 0-2.5 (-11.5) cm long, glabrous, with (1-) 2-4 (-8) rachillae; rachillae (2.5-) 6-15 cm long, c. 1 mm diam., glabrous, with distant superficial triads and white flowers. STAMINATE FLOW-**ERS** with sepals  $0.7-1 \times 0.8-1$  mm, the outer more keeled than the inner, orbicular, ciliolate; petals on a 0.6 mm high receptacle, 1.9-2.2 x 1-1.3 mm, elliptic or ovate, acute, striate; stamens 6, with the antepetalous filaments inserted slightly above the antesepalous ones, filaments connate for 0.15 mm, 0.8-0.9 mm long, thin, anthers dorsifixed and versatile, 1.1-1.2 x 0.4 mm, the locules parallel, slightly apiculate; pistillode c. 0.5 × 0.2 mm. PISTILLATE FLOWERS with sepals imbricate, 1-1.3 × 1.3-1.5 mm, orbicular, ciliolate; petals proximally ovate and imbricate, distally triangular, fleshy and valvate,  $2.1-3.3 \times 1.2-2.6$  mm, striate; staminodes 6, 0.2-0.3 mm; ovary 1-2 x 0.8-1.5 mm, ovoid or ellipsoid with pointed apex. Fruit bright red, ellipsoid, 9-11 x 3-5 mm. SEED c. 9 x 2-3 mm, with homogeneous endosperm. (Plate on next page).

**NOTE.** The Tsinkiara on the type has been taken for a locality, but is actually a Betsimisaraka name for any small palm.

Baker briefly mentions the *Meller* specimen in a note under *N. rhodotricha* in J. Linn. Soc. 22: 526 (1887) as distinct, but refrains from naming it.

*Perrier* 17214 has an unbranched or bifid inflorescence.

**SPECIMENS SEEN.** Andapa: Marojejy NE, E of Ambalamanasy II, Nov.-Dec. 1948 (fl.), *Humbert & Capuron* 22171 (K, P); Marojejy E, NW of Mandena, Feb. 1989 (fl.), *Miller & Lowry* 3942 (K, P);

idem, Nov. 1989 (fl.), Dransfield et al. JD6750 (K, TAN). Maroantsetra: Antongil Bay area, Oct. 1912 (fl.), Perrier 11978 (P); Sahavary, Feb. 1988 (fl.), Dransfield et al. JD6460 (K, TAN); Hiaraka, Oct. 1986 (old infl.), Dransfield et al. JD6377 (K, TAN). Mananara Avaratra: 10 km W of Antanambe, April 1992 (y.fr.), Beentje et al. 4648 (K, TAN); idem, Oct. 1994 (fr.), Beentje & Dransfield 4811 (K, TAN). Soanierana-Ivongo: Soanierana to Antasibe, Dec. 1938 (fl.), Lam & Meeuse 5858 (L). Ampasimanolotra: Ambila, March 1951 (bud), Benoist 862 (P). Moramanga: Beforon (Beforona), July 1862 (ster.), Meller s.n. 31.7.1862 (K). Anosibe-an-Ala: near confluence of Mangoro R and Onive R, Feb. 1923 (y.fr.), Perrier 17214 (P).

LOCALITY UNCLEAR: eastern forest, 1904 (fl.), Thiry s.n. (Holotype P).

## 72. Dypsis trapezoidea

A beautiful species known at present only from the isolated hill, Vatovavy, southwest of Mananjary. First collected by Bosser, we had initially included it within the variation of *D. thiryana*, but newly collected specimens show abundant differences between the two. This would be a beautiful ornamental. The species name refers to the leaflets that are almost trapezoid in outline.

**DISTRIBUTION.** Known only from Vatovavy, Ifanadiana.

**HABITAT.** Steep rocky slope at foot of cliff, primary lowland forest.

LOCAL NAMES. Not recorded.

**Uses.** Not recorded.

Conservation Status. Critical. Single-site locality; site



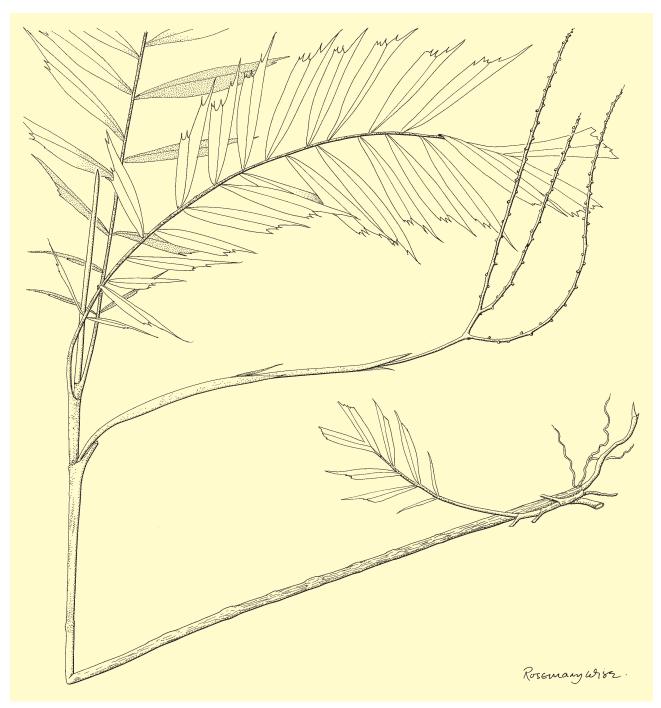
not protected, except by local fady (taboo); numbers low (estimated at less than a fifty).

## Dypsis trapezoidea J. Dransf. sp. nov.

statura et habitu solitario foliolis praemorsis *D. thiryanae* affinis sed petiolo longiore, foliolis latioribus, inflorescentiae rachidi rachillas breviores aequanti vel excedenti et fructu duplo-majore differt. Typus: Madagascar, Ifanadiana, Vatovavy, *Dransfield et al.* JD7512 (Holotypus K; isotypi AAU, BH, MO, NY, P, TAN).

Solitary slender palm of forest undergrowth. **STEM** to 1.2 m tall, c. 8–12 mm diam. at the base, c. 4–7 mm diam. distally, often conspicuously stilt-rooted at the base, dark grey brown and vertically cracked at the base, dull green distally, internodes 8–18 mm with scattered dark brown scales, nodal scars c. 1–2 mm wide. **Leaves** c. 7 in crown; sheaths 5–6.5 cm long, c. 1–1.2 cm diam., dull green with scattered evenly spaced thin brown scales, auricles

absent; petiole 9-19 cm long, c. 2 mm wide, densely silvery scaly, especially when newly emerged; rachis 21-36 cm, scaly as the petiole; leaflets c. 7-10 on each side of the rachis, mostly arranged in pairs, somewhat trapezoid in outline, with conspicuous praemorse tips, basal leaflets with proximal margin 5.5-6 cm, distal margin 7-9 cm and praemorse margin 0.8-2 cm; mid-leaf leaflets with proximal margin 6.5-8 cm, distal margin 7-11 cm and praemorse margin 2-3 cm; apical leaflet pair much shorter than the rest with proximal margin 3.5-4 cm, distal margin 2.5-3 cm and praemorse margin 2-3.5 cm; leaflets drying pale green, adaxially with scattered brown punctiform scales, abaxially covered with dense white punctiform scales, abaxially also with a band of grey indumentum along the proximal and distal margins. Inflorescence interfoliar, much shorter than the leaves, branched to 1 order; peduncle 7-12.5 cm, c. 2 mm wide, densely covered with brown scales; prophyll 9-10 x 0.4-0.6 cm, sparsely scaly; peduncular bract exceeding the prophyll by 4-5 cm; rachis 5-8 cm, densely scaly as the peduncle; rachillae 5-6 (-8), equalling or shorter than the



**Dypsis thiryana**. Whole plant × 3/5. From *Dransfield et al.* JD6750. Drawn by Rosemary Wise.



**Dypsis trapezoidea.** A base of stem  $\times$  3/5; **B** crown with inflorescence  $\times$  3/5; **C** detail of rachilla  $\times$  4; **D** endocarp  $\times$  1.5; **E** endocarp and seed in section  $\times$  1.5. All from *Dransfield* JD7512. Drawn by Rosemary Wise.

rachis, diverging at right angles, at maturity c. 3.5–5.5 cm, much shorter when newly emerged, c. 1.5 mm diam., sparsely papillose and scaly, bearing triads c. 1–4 mm distant, rachilla bracts rounded-triangular, c. 1 mm high. **Staminate Flower** buds (still immature) rounded, c. 1.2 mm diam.; sepals rounded, imbricate, irregularly keeled, c.  $0.8\times0.8$  mm, margins sparsely scaly; petals triangular,  $0.9\times0.7$  mm; stamens 6, immature anthers  $0.5\times0.2$  mm; pistillode columnar. **PISTILLATE FLOWERS**, only very young buds known. Mature **FRUIT** cherry-red, fusiform,  $18\times6$  mm. **SEED** c.  $15\times4$  mm, endosperm homogeneous.

**Note:** Because of the praemorse leaflets this species appears very similar to *D. thiryana*. It can be distinguished by the consistently solitary habit, the sparse

evenly distributed scales on the sheaths (rather than thick patchy scales), the much longer petioles, the wider, almost trapezoid leaflets and the more numerous but much shorter rachillae that are shorter than the inflorescence rachis (rather than being few, and much longer than the rachis). The mature fruit is also more or less twice the size of that of *D. thiryana*.

**SPECIMENS SEEN:** Mananjary: Mt. Vatovavy, Nov. 1994 (buds, fr.), *Dransfield et al.* JD7512 (Holotype K; isotypes AAU, BH, MO, NY, P, TAN). idem, Jan. 1964, *Bosser* 18905 (P, TAN).