Dypsis caudata

cm long, 4–7 mm wide, opening in the distal 1 cm only, with scattered scales; peduncular bract inserted at c. 16 cm from the base of the peduncle, c. 11 cm long; non-tubular peduncular bract 2–4 mm long; rachis c. 7 cm long, with c. 11 branches; rachillae orange, 4–5.5 cm long, c. 1 mm diam., minutely puberulous and scaly. **STAMINATE FLOWERS** with sepals 0.7–0.8 x 0.7–0.8 mm; petals orange, 1.5–1.7 x 1.4–1.5 mm; stamens 6, biseriate (offset 0.2 mm), filaments 0.6–0.8 mm, thin; anthers 1–1.2 x 0.7 mm; pistillode c. 0.8 x 0.3–0.4 mm. **PISTILLATE FLOWERS** with sepals 0.7–0.8 x 0.6–1 mm; petals orange, 2.2–2.3 x 1.5–2.4 mm; staminodes 6, c. 0.4 mm; pistil c. 2.2 x 1.5 mm. **FRUIT** orange, 8–11 x 3.5–5 mm. **SEED** c. 7 x 3.5 mm, with homogeneous endosperm.

NOTE. Probably related to *D. linearis* but very distinct in its leaflets with their long drip-tips.

SPECIMENS SEEN. Maroantsetra: Antalavia, Feb. 1988 (fl., y.fr.), *Dransfield et al.* JD6478 (Holotype K; isotype TAN); idem, April 1988 (fr.), *Gentry & Schatz* 62179 (K); idem, Nov. 1989 (bud), *Dransfield et al.* JD6741 (K, TAN).

57. DYPSIS SCANDENS

This remarkable species is the first climbing palm to be recorded for Madagascar. In habit and texture, it bears an uncanny resemblance to the central American climbing palm, *Chamaedorea elatior* Mart., so much so that on first finding it in November 1994, we had to examine the inflorescences closely to convince ourselves that the plant was an Arecoid palm rather than a Ceroxyloid.

Its discovery, just before the manuscript of this book was completed, emphasises yet again the extraordinary richness of the Madagascar palm flora and how much there may yet be to discover and describe. The species name is Latin for 'climbing'.

Dypsis scandens, growing on a quartzite ridge near Ifanadiana.

DISTRIBUTION. Ifanadiana area, only known from one site.

HABITAT. Low canopy forest with small crowns on poor soils on quartzite ridge; 500 m.

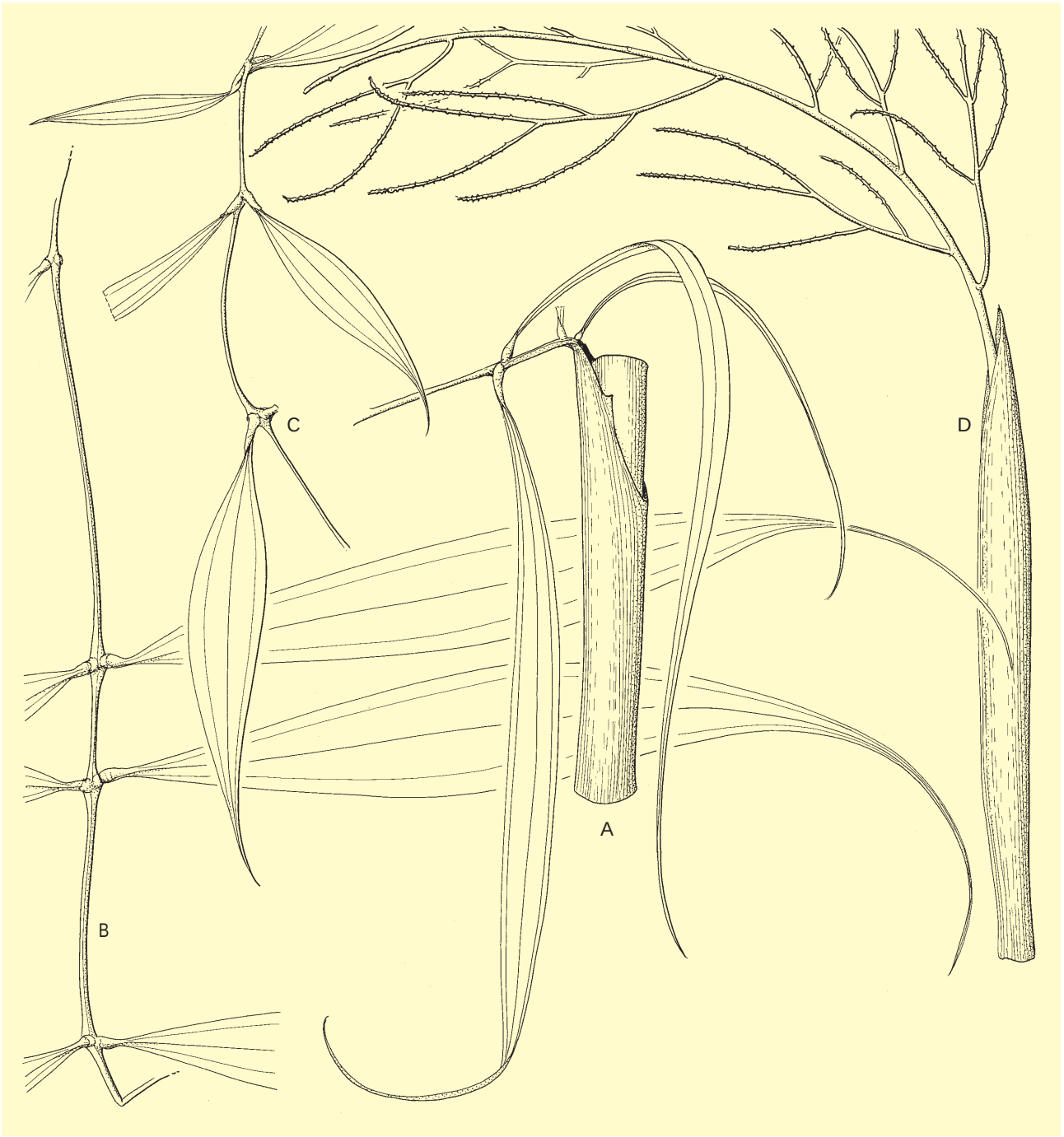
LOCAL NAMES. *Olokoloka* (Tanala).

USES. Stems harvested for splitting to make fish traps, bird cages and hats. Said to be widespread in the area, but much harvested.

CONSERVATION STATUS. Probably endangered if not critical. The forests in this area are not protected, and are under pressure from shifting cultivation.

Dypsis scandens *J. Dransf.*, **sp. nov.**
habitu scandenti, caudicibus gracilibus vaginis foliorum glabris, foliolis divaricatis, basin pulvinatis, inflorescentia in 2 ordines ramificanti instanter distinguibilis. Typus: Madagascar, Ifanadiana, *Dransfield & Beentje* JD7515 (Holotypus K; isotypi BH, P, TAN).

Clustering, climbing palm. **STEMS** to 8–10 m long, flexible, 7–12 mm diam., internodes 20–31 cm long, bright green, with scattered dark brown scales, nodal scars c. 2 mm wide; sheathed stem c. 1.5–1.8 mm diam. Stems carrying about 15 green leaves and several dead marcescent leaves. **LEAF**-sheaths 15–30 cm, pale green, smooth, with thin white wax, glabrous, turning dark



Dypsis scandens. **A** leaf base and stem enclosed by leaf sheaths x 2/5; **B** mid portion of leaf x 2/5; **C** leaf tip x 2/5; **D** inflorescence x 2/5. All from *Dransfield & Beentje* JD7515. Drawn by Rosemary Wise.

blackish brown on drying, auricles absent; petiole absent; rachis 1.1–1.45 m, 7 mm wide at the base, triangular in section, tapering to c. 1 mm diam. at the tip; leaflets c. 15–18 on each side of the rachis, grouped, lanceolate, long acuminate, mostly strongly reflexed and with a conspicuous basal woody pulvinus, basal leaflets arranged singly, then two distant groups of two leaflets, then mostly singly to the tip, the leaflets dull green, glabrous, turning dirty brown-black on drying, basal leaflets 20 x 0.2 cm, median 24–30 x 3–3.5 cm, distal to 6 x 1.5 cm. **INFLORESCENCE,** only dead mummified material available, interfoliar, branched to 2 orders; peduncle mostly enclosed by the subtending leaf sheath, 16–45 cm, 7–20 mm wide at the base, 3–10 mm diam. near the tip; prophyll borne up to 10 cm above the peduncle base, to 15–34 x 1.6–3.1 cm, membranous, somewhat striate, glabrous; peduncular bract only fragments known, c. 15 x 1.5 cm, much tattered; rachis 27–40 cm long, bearing c. 13–15 first order branches; lowermost branches 12–18 cm, bearing 3–6 rachillae; rachillae c. 40–50 in total, 8–12 cm long, c. 1.2 mm diam., triads c. 1–3 mm distant. **STAMINATE FLOWER** rounded; sepals ± rounded, gibbous, keeled, c. 0.8 mm diam., smooth; petals triangular, c. 1.5 x 1.5 mm, striate; stamens 6, somewhat biseriate, the antepetalous longer than the antesepalous, filaments 0.3–0.5 mm, anthers elongate c. 1 x 0.2 mm, joined to connective throughout their length; pistillode low, conical. **PISTILLATE FLOWER** with sepals rounded, c. 0.8 mm diam., smooth; petals triangular, striate, 1.8 x 2 mm, enlarging to 2 x 2 mm in fruit, ovary c. 1 mm diam. **FRUIT** ellipsoid, 8 x 4.5 mm; endosperm homogeneous.

NOTE. Unfortunately the type bears only dead inflorescences; however, we found one mummified fruit and several flowers still attached to the inflores-

Dypsis scandens

cences and this has allowed a rather complete description to be prepared. The climbing habit makes this species instantly identifiable. The leaves have distinctive distant reflexed leaflets that are grossly swollen at the base in the manner of those of *D. pinnatifrons* and *D. nodifera*.

These reflexed leaflets presumably act, as in *Chamaedorea elatior*, as grapnels that help to support the long flexible stems. Leaf texture and inflorescence, flower and fruit structure suggest that the relationships of *D. scandens* are probably with *D. jumelleana* and related species.

SPECIMENS SEEN. Ifanadiana: c. 10 km east of Ifanadiana, Nov. 1994 (dead infl.), *Dransfield & Beentje* JD7515 (Holotype K; isotypes BH, P, TAN)

58. DYPSIS FANEVA

A fairly rare species from lowland rain forest, but highly distinctive. The name *faneva* (flag in Malagasy) refers to the leaves, which are remarkable for the large terminal flabellum.

DISTRIBUTION. Maroantsetra, Mananara and near Fenoarivo.
HABITAT. Littoral forest or moist lowland rain forest, on steep or level slope; 1–300 m.
LOCAL NAMES. *Tsinkiara mavinty* (Betsimisaraka).
USES. None recorded.
CONSERVATION STATUS. Endangered. The lowland rain forest in this area is not well protected, and numbers are low; we have seen less than fifty individuals.

Dypsis faneva *Beentje* **sp. nov.**
D. boivinianae affinis sed inflorescentia in plures ordines ramificanti rachillis brevibus *D. procerae* et *D. paludosae* superficialiter similis sed staminibus 6 non 3 differt. Typus: Antalavia, *Dransfield et al.* JD6465 (Holotypus K; isotypi P, TAN).

Clustering palm in tufts of 3–12 stems. **STEMS** 3–6 m, 3–5 cm diam.; somewhat stilt-rooted at base; internodes 3–10 cm, brown; wood soft; crownshaft moderately well-developed, with occasionally a yellowish stripe below the rachis. **LEAVES** 8–9 in the crown (sometimes with up to 4 marcescent leaves present), spirally inserted, porrect and arching; sheath pale creamy yellow or green, spotted with red, 24–30 cm long, with scattered brown scales (distally rather dense), with auricles to 3.2 cm high; petiole absent or up to 10 cm long, with scattered scales, channelled adaxially, 9–10 x 5–6 mm diam.; rachis 79–94 cm long, in mid-leaf 5–6 mm wide, with scattered scales; leaflets 8–21 on each side of the rachis, regular, stiff, straight, in one plane, somewhat arcuate, 1–4 folds wide, proximal 25–63 x 0.1–3.6 cm, median 62–72 x 1.7–11 cm (interval 6–7.5 cm), distal 42–55 x 7–10 cm, main veins 1–4, apices long-attenuate, main veins with ramenta, minor veins with scattered scales, distal pair joined for 11–17 cm, with 8 main veins, apices dentate over a width of 2–2.2 cm. **INFLORESCENCE** interfoliar, branched to 2 orders, spreading, c. 50 x 50 cm; peduncle 28–64 cm, distally 1.2–1.7 x 0.5–1 cm diam., rusty-pubescent; prophyll 29–54 cm long, borne at 13–17 cm above the base of the peduncle, 2.2–2.5 cm wide, with scattered scales, opening for the distal 4–6 cm; peduncular bract inserted at 21–30 cm from the base of the peduncle, 12–30 cm long, split over its distal 10–14 cm; rachis 14–19 cm, with 4–6 branching and 7–16 unbranched first order branches (the proximal with an axis of 9 cm, with 5 rachillae), all axes hairy; rachillae 10–28 cm long, with scattered scales, with distant triads. **STAMINATE FLOWERS** orange in bud; sepals 1.3–1.8 x 1.2–1.5 mm, the middle one sometimes very asymmetrical; petals 1.9–2.8 x 1.5–2.1 mm; stamens 6, didymous, 1- or biseriate (offset to 0.4 mm), filaments 0.8–1 mm, fat and ellipsoid, anthers 0.6–0.7 x 0.7–0.9 mm; pistillode c. 1 x 1.2 mm, pyramidal. **PISTILLATE FLOWERS** unknown. **FRUIT** unknown.

Dypsis faneva