

*Dypsis anovensis* is known only from its type. The combination of slender, linear leaflets and small sparsely branched inflorescence is paralleled by *D. cookei* from high elevation forest on Marojejy; however, the leaflet texture of the latter is different and there are consistently more leaflets on each side of the rachis, that dry dark rather than pale green. Some of the dimensions mentioned by Jumelle suggest that he had more mature inflorescences at hand than the one preserved on the type sheet in P.

**SPECIMEN SEEN.** Soanierana-Ivongo: near to River Anove, Sept. 1912 (buds), *Perrier* 12066 (holotype P).

## 124. DYP SIS AMBILAENSIS

This is a small palm of the undergrowth of white sand forest developed on raised beaches behind the East Coast. It appears superficially to be almost identical to *D. forcifolia*. Unfortunately, there are no easy ways to identify the two species, without dissecting the flowers and observing the stamens. However, we have noted that the two species appear to be geographically separated. Ambila-Lemaitso, the type locality, is the root of the species name.

**DISTRIBUTION.** East Coast, Tampina to Ambila-



**Dypsis anovensis.** A crown  $\times 2/5$ ; B detail of rachilla  $\times 3$ . All from *Perrier* 12066. Drawn by Margaret Tebbs.

Lemaitso, south of Toamasina.

**HABITAT.** Coastal forest on white sands at low elevation.

**LOCAL NAMES.** Not recorded.

**USES.** Not recorded.

**CONSERVATION STATUS.** Endangered. Known only from the coastal white sand forests south of Toamasina, forests that are of very limited extent and much prone to damage by fire, as well as to development.

**Dypsis ambilaensis** *J. Dransf. sp. nov.*

habitu foliisque *D. forficifoliae* superficialiter similis sed floribus staminatis triandris staminibus antepetalis staminodiis antesepalis alternantibus differt. Typus: Madagascar, Ampasimanolotra, Ambila-Lemaitso, *Dransfield* JD6496 (Holotypus K; isotypus TAN)

Slender, clustering undergrowth palmlet, 1–3 m tall. **STEMS** c. 5–8 mm diam., internodes 7–18 mm long, green when young, densely covered with caducous dark brown to black scales, old internodes ± blackish. **LEAVES** c. 7–8 in crown; leaf-sheaths 6–8 × 0.9–1.5 cm, striate, sparsely covered with caducous black scales near base, densely covered distally, leaf sheath mouth with 2 triangular, membranous auricles 3–5 × 3–4 mm; leaf c. 25–40 cm long; petiole absent or to 7 × 0.2–0.4 cm; rachis 15–22 cm long, abaxially covered with blackish scales; blade entire bifid, to 22 × 11 cm, the apical lobes to 13 × 5.5 cm, or divided into 2–4 pairs of narrow to broad, ± sigmoid leaflets, the narrowest at the base, the mid-leaf leaflets usually the broadest, leaflets ranging from 7–20 × 0.5–4 cm, the apical pair (or the two lobes in the



**Dypsis  
ambilaensis**



**Dypsis ambilaensis**, a palm of coastal forest on white sand, Ambila-Lemaitso (*Dransfield et al.* JD6444).



**Dypsis ambilaensis.** **A** crown with inflorescence  $\times 1/2$ ; **B** staminate flower showing antepetalous stamens  $\times 10$ . All from *Dransfield et al.* JD6496. Drawn by Rosemary Wise.

entire, bifid leaf) shallowly lobed distally, adaxial surface glabrous, abaxial surface with bands of caducous brown scales, numerous punctiform scales and sometimes with long narrow ramenta along main ribs. **INFLORESCENCE** interfoliar, only slightly exceeding leaves, branching to 2 orders; prophyll  $12-25 \times 0.4-0.5$  cm, bearing sparse to dense lacinate red-brown scales or glabrescent; peduncle  $17-25 \times 0.2$  cm bearing scattered lacinate dark red-brown scales; peduncular bract exceeding the prophyll by c. 2-6 cm, otherwise similar; rachis 9-26 cm, sparsely to rather densely covered in red-brown lacinate scales; first order branches 10-27, at least about a half of them branching to the second order; rachillae 16-c. 55, slender, 3-5.5 cm, c. 0.7 mm diam., glabrous, bearing triads c. 2-3 mm distant, each subtended by a low rounded rachilla bract, the bract usually with lacinate red-brown hairs to 1 mm long along margin. **STAMINATE FLOWERS** at anthesis c. 1 mm diam., red, with slight fecal smell; sepals

unequal, broad, imbricate,  $0.5 \times 0.4-0.7$  mm; petals rounded triangular, striate,  $0.8 \times 0.6$  mm; stamens 3, antepetalous, filaments connate at the very base, free portion  $\pm$  triangular,  $0.3 \times 0.3$  mm, anthers didymous,  $0.3 \times 0.1$  mm, staminodes minute, c.  $0.1 \times 0.1$  mm; pistillode a low dome. **PISTILLATE FLOWERS** globular, c. 1.1 mm diam.; sepals irregularly rounded, imbricate c.  $0.5 \times 0.5$  mm; petals broadly triangular c.  $1 \times 1$  mm, valvate, imbricate only at the base, striate; staminodes 5-6, irregular, c.  $0.15 \times 0.1$  mm; ovary rounded, c. 1 mm diam., stigmas 3, thread-like, c. 0.15-0.2 mm. Immature **FRUIT** curved; mature fruit somewhat curved, red,  $10-15 \times 4.5-5$  mm, striate when dry. **SEED**  $8 \times 3.5$  mm; endosperm homogeneous, embryo lateral, c. 2 mm above base.

**NOTE.** This species is superficially very similar to *D. forficifolia* and can only be separated with certainty

if staminate flowers are available. In *D. ambilaensis* there are three antepetalous stamens and three staminodes (i.e., this species belongs to the previously recognised *Dypsis* § *Trichodypsis*) while in *D. forficifolia* the stamens are antesepalous and there are no staminodes (i.e., this species belongs to *Dypsis* § *Dypsis*). So far, *D. ambilaensis* has been found only in coastal forest on white sands near Ambila-Lemaitso and Tampina, south of Toamasina. It is particularly confusing that *D. forficifolia* can grow in an apparently identical forest type along the coast further to the north, near Mananara.

A few of the staminate flowers on the specimen *Dransfield et al.* JD6444 appear to have six fertile stamens (see also *Dypsis thermarum*).

**SPECIMENS SEEN.** Toamasina: Tampina, Forest Reserve near railway, Dec. 1938 (fl.), *Lam & Meeuse* 6040 (L). Ampasimanolotra: Ambila-Lemaitso, forest west of lagoon on white sand, March 1988 (fl.), *Dransfield* JD6496 (Holotype K; isotype TAN); Nov. 1986 (fl.), *Dransfield* JD6444 (K, TAN); idem, Feb. 1924 (fl., fr.), *Perrier* 16039 (P); idem, May 1928 (fl., fr.), *Decary* 6480 (P).

## 125. *DYPsis* *GLABRESCENS*

A small solitary or clustering palm of the undergrowth of lowland forest in the north-east of the island. The species epithet, Latin for becoming glabrous (lacking hairs) refers to the branches of the inflorescence. In some populations, the rachillae are quite hairy when they are newly expanded.

**DISTRIBUTION.** Madagascar, only known from Île Sainte Marie, Mananara Avaratra and Betampona.

**HABITAT.** Rain forest; tending to occur in valley bottoms. 50–600 m.

**LOCAL NAMES.** Not recorded.

**USES.** Not recorded.

**CONSERVATION STATUS.** Endangered; despite being known from three localities, all populations are small. Only in Betampona does the palm occur within a reserve.

***Dypsis glabrescens* (Becc.) Becc.**

*Palme del Madagascar* 16 (1913); *Jum., Ann. Inst. Bot.-Géol. Colon. Marseille sér. 3, 6 (1): 30* (1918); *Bull. Acad. Malgache* 6: 11 (1923); *Cat. Pl. Madagascar, Palmae*: 12 (1938); *Jum. & H. Perrier, Fl. Madagascar* 30: 43 (1945).



***Dypsis glabrescens***, growing in the Mananara Avaratra Biosphere Reserve.