



**Dypsis
antanambensis**

mm diam., somewhat pitted, bare at the base, densely covered in tiny stellate scales, with distant triads, more distally with paired flowers only; rachilla bracteoles c. 3×0.6 mm. **STAMINATE FLOWERS** with sepals $1.4\text{--}1.6 \times 1.4$ mm; petals (in bud) $1.7\text{--}1.8$ mm long; stamens 6, biseriate, the outer (antesealous) series sessile, the inner series with filaments c. 0.6 mm long, anthers c. 0.6×0.4 mm, dorsifixed, locules parallel. **PISTILLATE FLOWERS** with sepals $1.4\text{--}1.6 \times 1.4$ mm; petals (in bud) $1.7\text{--}1.8$ mm long; gynoecium c. 0.8×0.5 mm; staminodes c. 0.2 mm. **FRUIT** unknown, except for:

endocarp very fibrous, $15\text{--}25 \times 12\text{--}18$ mm. **SEED** with deeply ruminant endosperm, the ruminations many and up to 5 mm deep. **EOPHYLL** pinnate.

NOTE. Among the species of the Vonitra-group this species can be distinguished by its short, stiff leaflets, the inflorescence branched to 1 order resembling *D. pusilla* but is much larger, has a greater number of leaflets and a larger inflorescence.

SPECIMENS SEEN. Mananara Avaratra: Antanambe, April 1992 (bud), *Beentje et al.* 4629 (Holotype K; isotypes BH, MO, P, TAN, type); idem, Oct. 1994 (sd.), *Beentje & Dransfield* 4809 (K, TAN).

118. DYP S I S PUSILLA

This is the smallest species of the “Vonitra” group. It is an attractive palm of the undergrowth in valley bottoms. The stems are almost always unbranched, and often solitary, and densely clothed with very short piassava. It can be distinguished from other species in the group by the short usually unbranched stems, the short piassava, the delicate curving leaflets and the inflorescence that is branched to one order only. Its rather dainty appearance is reflected in the species name. As far as we know, this species is not in cultivation, but it would clearly be an attractive subject for a small garden.

DISTRIBUTION. Masoala Peninsula and Mananara Biosphere Reserve.



Dypsis antanambensis, growing in forest on ultramafic rock, Mananara Avaratra (*Beentje et al.* 4629).



**Dypsis
pusilla**

HABITAT. Littoral forest on deep humus near the beach, riverine in moist forest, or on humus banks in moist forest on steep hillside; 1–220 m.

LOCAL NAMES. *Vonitra* (Betsimisaraka).

USES. Not recorded.

CONSERVATION STATUS. Vulnerable. With a fairly small distribution area and low numbers of individuals per population, this species might move into the Endangered category in the near future, if shifting cultivation continues apace in its native habitat.

Dypsis pusilla *Beentje sp. nov.*

D. fibrosae affinis insignis statura pusilla, trunco raro ramificanti,

inflorescentia brevi semel ramificanti. Typus: Madagascar, Antalavia, *Dransfield et al.* JD6474 (Holotypus K; isotypus TAN).

Solitary or clustered palm. **STEM** 0.8–2 m, usually unbranched, sometimes dichotomous; bare stem 4–5 cm diam., but usually covered with very thick layer of persistent fibrous leafbases and then c. 12 cm diam.; fibres coarse, short, not pendulous. Trunk with basal surface roots and occasionally with aerial roots at 40–50 cm from ground; bark brown, internodes 3–10 mm long. **LEAVES** 15–16 in the crown, up to 2 m long, pinnate with arching rachis; sheath 22–26 × 6–7.5 cm, with rather dense red or blackish lacinate scales, auricles (up to 5 cm long) and margins disintegrating quickly; petiole 75–100 cm long, c. 1 × 0.6 cm (proximal), × 0.6 × 0.4–0.5 cm (distal), flattened or slightly convex adaxially, convex to keeled abaxially, green to purplish with dense red lacinate scales; rachis 78–94 cm, in mid-leaf 3–4 mm wide, angular, with



Dypsis pusilla. **A** proximal part of leaf with lowermost leaflet × 1/2; **B** mid section of leaf × 1/2; **C** leaf tip × 1/2; **D** inflorescence × 1/2; **E** detail of rachilla × 8; **F** fruit × 2; **G** seed in cross section × 2. **A** – **C** from *Dransfield et al.* JD6474, **D** – **G** from *Beentje* 4468.

Drawn by Rosemary Wise.

scattered scales; leaflets 25–28 on each side of the rachis, stiff, proximally at an angle of 90° with the leaflets on the opposite side of the rachis, more distal in one plane, regular, glossy dark green, proximal ones 19–41 × 0.3–2.5 cm (most proximal ones short and narrow), median 38–51 × 1.8–3.2 (interval 2.5–3 cm), distal 13–31 × 0.8–2.5 cm, the apical pair hardly connate, apices attenuate and bifid, main veins 3, with the midrib prominent adaxially, leaflets glabrous or with a few scattered scales near the base. **INFLORESCENCE** interfoliar, erect, branching to one order (in *Beentje* 4651 with the most proximal rachilla bifurcate); peduncle 47–132 cm, proximally 5–6 × 4 mm, distally 3–5 × 2–4 mm, with dense reddish lacinate scales but soon glabrescent; prophyll 10–34 cm long, 2-keeled, with a few scattered reddish scales, cylindrical, split at apex only, soon disintegrating at the apex; peduncular bract inserted at 7–14 cm from base, 30–48 cm long, pale brown with patches of dense reddish scales, circumscissile but carried up and covering the rachillae until expansion, beaked for 9–10 cm; rachis 7–15 cm, with 17–22 branches; rachillae green, occasionally with a bulbous base, 12–32 cm long, 2–2.5 mm diam., covered in minute stellate scales; triads spirally arranged, quite close, in pits. **STAMINATE FLOWERS** globose in bud; sepals 0.6–1 × 1–1.3 mm; petals 1.7–1.8 × 1.2–1.5 mm, ovate, acute; stamens 6, in 2 series, didymous, filaments 0.4–0.8 mm long, anthers 0.4–0.5 × 0.5–0.6 mm, rounded; pistillode 0.2–0.9 × 0.4–1 mm, hexagonal with central trifid apex. **PISTILLATE FLOWERS** with sepals c. 0.5 mm high, 1 mm wide, petals 1.4–1.8 × 1.2–1.3 mm; ovary 1–1.4 mm high, 1.1–1.2 mm diam., slightly asymmetrical; staminodes 0.3 mm high. **FRUIT** purple to black, obovoid, rounded, 13–19 × 9–15 mm; mesocarp 1.2 mm thick, rather fleshy; endocarp fibrous. **SEED** 15–16 × 9–12 mm, with endosperm ruminations 3–4 mm deep.

NOTE. Distinct by its small stature, its trunk which rarely branches and its short inflorescence branched



Dypsis pusilla. HB provides scale, Mananara Avaratra.

to only one order; only very few inflorescences are present at the same time, which is unusual in the *Vonitra* group.

SPECIMENS SEEN. Maroantsetra: Antalavia, Feb. 1988 (y.fr.), *Dransfield et al.* JD6467 (K, TAN); idem, Feb. 1988 (y.fr.), *Dransfield et al.* JD6474 (K, P, TAN); Ambanizana, Nov. 1992 (bud, fr.), *Schatz et al.* 3394 (K). Mananara Avaratra: Antanambe, Oct. 1991 (bud), *Beentje* 4461 (K, MO, P, TAN); idem, Oct. 1991 (fr.), *Beentje* 4468 (BH, K, TAN); idem, April 1992 (fr.), *Beentje et al.* 4651 (K, TAN).

119. DYPISIS AQUATILIS

INSUFFICIENTLY KNOWN SPECIES

This species is known from a single incomplete specimen. The collector described it as growing beside a river and in the water. The inflorescence seems to have a long peduncle and is somewhat reminiscent of those of members of the “*Vonitra*” group. We are tempted to suggest that this is a stemless rheophyte and those with a mind to try to refine it should perhaps look for a palm with a habit reminiscent of *Chamaedorea cataractarum*.

DISTRIBUTION. Manantenina.

HABITAT. “Riverside and in the water” (Guillaumet).

USES. Not recorded.

CONSERVATION STATUS. Uncertain. Probably Endangered, since it seems to be restricted to a single area.



Dypsis aquatilis