

*lastelliana* in the Flore de Madagascar (notoriously unreliable) are not pertinent.

A problem is *Perrier* 15802 (P), from Ambilobe: upper Mananjeba R., c. 400 m alt., Aug. 1903 (fl.) with very red-cottony leaf sheaths, which is quite like *leptocheilos*, it has rachillae almost without any lip on the rachilla bract, and so is unlike either *leptocheilos* or *lastelliana*.

**SPECIMENS SEEN.** Cultivated material originating from Madagascar and grown in Tahiti, Papeari, April 1992 (fr., seedling), *D.R. & M. Hodel* 1144 (type, K). And probably: without locality, anno 1986 (seed), *Razafindratsira* s.n. (K).

## 17. DYPsis LIGULATA

### INSUFFICIENTLY KNOWN SPECIES

The name refers to the 'ligule' or auricle on the leaf sheath, a character much used by Jumelle, but of doubtful value in separating species.

**DISTRIBUTION.** NW Madagascar.

**HABITAT.** Moist forest on sandstone, at low elevation.

**LOCAL NAMES.** Not recorded.

**USES.** Palm-heart edible.



**Dypsis leptocheilos.** **A** leaf sheath  $\times 1/5$ ; **B** mid section of leaf  $\times 1/5$ ; **C** leaf tip  $\times 1/5$ ; **D** first order inflorescence branch  $\times 1/5$ ; **E** detail of rachilla  $\times 2$ ; **F** seedling  $\times c. 1/2$ . All from *Hodel & Hodel* 1144. Drawn by Margaret Tebbs.

**CONSERVATION STATUS.** Possibly extinct; not seen for over 70 years.

**Dypsis ligulata** (Jum.) Beentje & J. Dransf. **comb. nov.**

**Synonym:**

**Neodypsis ligulatus** Jum., Ann. Inst. Bot.-Géol. Colon. Marseille sér. 4, 2 (2): 19 (1924); Jum., Cat. Pl. Madagascar, Palmae: 18 (1938); Jum. & H. Perrier, Fl. Madagascar 30: 152 (1945). Type: Madagascar, Sambirano, Belinta, W base of Mt Kalabenona, *Perrier* 15414 (Holotype P).

Solitary palm. **TRUNK** 4–6 m high, c. 20 cm diam., smooth, ringed. **LEAVES** with the sheath (fide Perrier) whitish, glabrous, with distinct, unequal, obtuse auricles; petiole not seen; rachis in mid-leaf keeled, c. 1.8 cm wide and 2.2 cm high, with scattered scales; leaflets presumably regular, the proximal not seen, median c. 120 × 2.3–2.5 cm (interval 3.5–4 cm), distal 23–42 × 0.5–1.4 cm, the terminal pair joined for c. 6 cm, main veins 1 (–3), with thickened margins, with scattered red ramenta 2–4 mm long on the proximal part of the midrib, otherwise glabrous, apices unequally attenuate, bifid. **INFLORESCENCE** branched to 2 orders; the only first order branch seen with a secondary rachis 27 cm long, proximally 1.2 × 0.6 cm, glabrous, with 17 rachillae; rachillae 24–34 cm long, 2–2.5 mm diam., with distant slightly sunken triads, the rachilla bracts small and rounded. **STAMINATE FLOWERS** not seen. **PISTILLATE FLOWERS** not seen; in fruit the persistent sepals 1.8–2.2 × 2.5–2.8 mm, petals 3.2–3.6 × 3.8–4.1 mm; staminodes 0.6–0.7 mm, flat. **FRUIT** yellowish, ellipsoid, 12–16 × 7–8.5 mm, with an obtuse apex; endocarp fibrous, the fibres anastomosing. **SEED** ellipsoid, c. 13 × 7.5–8 mm, pointed at the base, obtuse at the apex, with a sub-aequatorial depression; endosperm ruminant, the ruminations few, distant, 1–2 mm deep.

**NOTE.** The protologue describes the auricles as 0.8–1.5 cm long; the petiole as 12 cm long; the proximal segments as 75–100 × 0.4–0.8 cm; inflorescence branched to 2 orders; prophyll 40 × 6 cm, with scattered scales. It also has the Sakalava name *Kindro*. None of these details is apparent from the Paris specimen. We are unable to comment on the affinities of this species.

**SPECIMENS SEEN.** Ambilobe: Belinta, Feb. 1923 (fr.), *Perrier* 15414 (Holotype P).

## 18. DYPISIS SAINTELUCEI

A medium-sized, elegant palm which would probably do well in cultivation. It occurs on white sand, and so would probably do well in the drier tropics; the habitat is that of *D. lutescens*, one of the most successful ornamental palms.

**DISTRIBUTION.** Only known from the Sainte-Luce forest in the extreme South-East of the island.

**HABITAT.** Coastal forest on white sand; 10–20 m.

**LOCAL NAMES.** Not recorded.

**USES.** Not recorded.



**Dypsis ligulata**

**CONSERVATION STATUS.** Critical. Only known from a single forest, with numbers less than fifty; this is right in the middle of the area where mining operations for mineral sand (ilmenite ore) are proposed.

**Dypsis saintelucei** Beentje **sp. nov.**

inter species arborescentes tristichas foliolis regulariter dispositis endospermio homogeneo *D. ampasindavae* affinis sed vagina folii clausa et inflorescentia interfoliacea longa differt. Typus: Madagascar, St. Luce, *Beentje* 4760 (Holotypus K; isotypi BH, MO, P, TAN).

Solitary palm (occasionally in clumps of 2–3). **TRUNK** 6–10 m, c. 14 cm diam.; internodes 3–5 cm long, grey, green more distally; nodal scars 1.6 cm high, whitish; wood very hard, red; crownshaft waxy green. **LEAVES** tristichous, 7–11 per crown, porrect, slightly arching distally; sheath c. 80 cm, 12 cm diam., closed, waxy pale green, smooth, with brown-tattering shoulders; petiole absent or up to 13 cm long, 2–2.5 × 2–2.5 cm diam., channelled with sharp edges, green, glabrous; rachis 2.3–2.4 m long, proximally deeply channelled and 4 × 3 cm, more distally keeled, green, in mid-leaf 1.5–2.3 cm wide, proximally with thin grey wax or scales, distally glabrous; leaflets 59–61 on each side of the



**Dypsis saintelucei**, in coastal forest, Sainte Luce (*Beentje* 4760).