

(holotype P). Ifanadiana: Tsaratanana (juv.), *Beentje* 4440 (K, MO, TAN). Manakara: 39 km NNE of Manakara, July 1992 (fr.), *Beentje & Andriampaniry* 4726 (BH, K, MO, P, TAN). Farafangana: Manombo, Nov. 1991 (y.fr.), *Beentje* 4523 (BH, K, MO, P, TAN); idem, Jan. 1993 (old stam.), *Beentje & Andriampaniry* 4793 (K, TAN).

LOCAL NAMES & USES. 'Lakatra'; at Andasibe extensively used as a source of fibre for weaving of high-quality hats, the young leaves being harvested; this prevents the trees from growing, and most populations are pruned to a perpetually juvenile rosette stage. In its southern distribution area not well known, 'Lakatra' and 'Tsilanitafika' (cannot be cut down by an army) used occasionally.

The type and the material I found much further south agree perfectly in leaf and inflorescence details. The Flora (Jumelle & Perrier de la Bathie 1945), but not the protologue, describes the tree as being 15–30 m high, and with a DBH of 15–30 cm, while the wood is described as white and soft. I would treat these later additions with suspicion.

The seed is unique within the genus in having a pointed acumen.

15. *Ravenea albicans* (Jum.) *Beentje* comb. nov.

Louvelia albicans Jum. in Ann. Inst. Bot.-Géol. Colon. Marseille 5, 1, 1: 5 (1933); Jum. & H. Perrier in Fl. Madagascar 30: 162 (1945), **synon. nov.** Pollen illustrated in Genera Palmarum (1987): 27, Plate 1.7: H. Type: Madagascar, Masoala, *Perrier* 11939 (holotype P).

Slender undergrowth palm; *trunk* 3–6 m, DBH up to 11 cm, covered in marcescent, litter-trapping sheath bases. *Leaves* c. 8 in the crown, porrect, 3–4 m long; sheath c. 72 cm, with brown-velvety tomentum over green; petiole 0–34 cm, proximally about 5 × 4 cm across, distally 3.7 × 3.3 cm across, canaliculate; rachis c. 3.7 m long, in midleaf 2–2.2 cm wide with 8 mm wide keel, with transverse ('zebra') striping especially abaxially; leaflets stiff, in one plane, 45–47 on each side of the rachis, the proximal 62–65 × 2.2–2.5 cm, median 75–83 × 6.6–7.2 cm (the protologue gives 50–60 × 2–2.5, but in the type the apices are broken off and the leaflets are folded) (interval 4.5–5 cm), distal 20–25 × 0.8–1.5 cm; abaxially with continuous white tomentum. *Staminate inflorescences* solitary, interfoliar, branching to 1 order, hardly exerted, mostly hidden among sheaths and leaf remnants; peduncle distally 12 × 6 mm, dense white-puberulous; with 3(–4?) bracts, the first being destroyed at anthesis, the ones seen 25 cm, 30 cm, 32–35 cm; rachillae 5–8 cm long, 2.5 mm across; calyx reduced to 3 small triangular teeth < 2 mm; petals elongated, triangular and acuminate, 5.5–6.5 mm, free or hardly connate at the base; episepalous stamens with large filament, appearing free among the spread petals; epipetalous stamens with filament connate to inner side of petals, the anthers therefore appearing sessile. *Pistillate inflorescences* solitary, interfoliar, erect, 126–150 cm, branched to 1 order; peduncle 94–120 cm, proximally 2.5–3.4 × 1.2–1.7 cm across, distally 1.5 × 0.8 cm; prophyll c. 18 × 7.5 cm; peduncular bracts seen 27 cm, 34 cm, 46 cm; rachis 8–12 cm; rachillae 8–13 in number, 17–29 cm long; pedicels 1–2 mm; flowers unknown. *Fruit unknown*. Eophyll bifid, with the

characteristic white abaxial surface of the leaflets.

DISTRIBUTION. NE Madagascar; the protologue says common between Fenerive (Fenoarivo) and Antalaha, but does not cite any specimens for this distribution. The palm is certainly not common nowadays.

HABITAT. Moist forest at 100–400 m alt; steep midslope on ultramafic soil.

SPECIMENS EXAMINED. Masoala, presumably near Antalaha, no date (stam.), *Perrier* 11939 (holotype P). Mananara: W of Antanambe, April 1992 (old pist.), *Beentje et al.* 4630 (K), 4643 (K, MO, P, TAN); idem (seedling) *Beentje et al.* 4644 (K).

LOCAL NAMES & USES. ‘Hoza-tsiketra’ (Betsimisaraka); heart edible.

The protologue states the petals are 9×2.5 mm, but this does not agree with the type; they are also definitely free at the base.

16. *Ravenea louvelii* *Beentje* nom. nov.

Louvelia madagascariensis Jum. & H. Perrier in *Compt. Rend. Acad. Paris* 155: 411 (1912); Jum. & H. Perrier in *Ann. Inst. Bot.-Géol. Colon. Marseille* 3, 1, 1: 58, t. 33 (1913); Becc. in *Palme del Madagascar*: 53, fig. 43, tav. 49 (1914); Jum. in *Ann. Inst. Bot.-Géol. Colon. Marseille* 4, 5, 1: 47 (1927); Jum. & H. Perrier in *Fl. Madagascar* 30: 165, fig. 46 (1945), **synon. nov.** Type: none indicated, locality Analamazaotra, “Lakamarefo”, alt. 800 m (probably *Perrier* 12021 (holotype P) which has “type” on the label, written by Jumelle).

Short undergrowth palm; *trunk* 1.5–3 m, DBH 15–20 cm without leaves, c. 50 cm with the sheath bases; distal 1.5 m of trunk with sheath remnants, proximal part only with sheath bases; wood hard; internodes c. 3 cm. *Leaves* 9–14 in crown, robust, porrect, stiff, with up to 15 marcescent leaves present; sheath 46–60 \times 6.5–8 cm, channeled adaxially, rounded abaxially, swollen at base, with dense soft pale brown tomentum, turning fibrous with age, with long stiff brown marginal fibres; petiole 50–130 cm long, proximally 3–5.5 \times 2–3.5 cm across, distally 2–3 \times 1.2–1.9 cm across, esp. abaxially covered in rich brown scales, with very sharp margins, adaxially channelled with the central part flat or with central ridge, abaxially rounded; rachis 225–300 cm long, in mid-leaf c. 19 \times 11 mm across, adaxially keeled with up to 9 mm wide flat keel top and abaxially more or less flat, with sharp upper edges, especially abaxially covered in brown scales, continuing past the distal pair of leaflets for 10–21.5 cm; leaflets in one plane, slightly pendulous in distal part of leaflet, dark green, attenuate, 80–104 on each side of the rachis, the proximal ones 28–42 \times 0.3–1 cm, median 47–67 \times 1.4–2.6 cm (interval 1.5–2.5 cm), distal 10–40 \times 0.4–1.8 cm, with some rammenta near the very base of the leaflet, or in young leaves with brown scales along the margins and apex, the midrib and the base; venation faint but visible. *Staminate inflorescence* hidden among the leafbases, solitary, 30–40 cm long, branched to 1 order; peduncle 34–36.5 cm, proximally c. 8 \times 6 mm across, scaly; prophyll c. 10 cm long, cream-coloured; peduncular bracts purplish, 12–15 cm, c. 20 cm, 36–38.5 cm, c. 40 cm, the most distal beaked, completely sheathing the inflorescence, covered in brown stellate scales; rachis 21–25 cm, with c. 80 crowded rachillae; proximal rachis bracts 4–12 \times 1–3 mm, rachillae 1–7 cm long and 1–2.5 mm across, glabrous; flowers closely set,