musty-scented, cream-coloured; pedicels 0·2–1 mm, 0·8–1 mm across; bracteoles 1·3–1·5 × 0·8 mm, connate for 0·4–0·7 mm; calyx connate for 0·6–1 mm, 2·8 mm across, the free lobes 1–1·2 × 0·7–0·8 mm; petals 6·5–7 × 2·4–2·7 mm, ovate, acute, connate for 1 mm at the base by the fleshy base of the antesepalous filaments, deliquescent after anthesis; anthers 3·2–4 × 1–1·3 mm, the antesepalous basifixed with a fleshy filament of 1–2 × 1·5–2 mm, the antesepalous ones dorsifixed and inserted 2 mm up the petal; pollen white; pistillode 1·3 mm, 0·9–1 mm across, white. *Pistillate inflorescence* interfoliar, hidden among the leaf bases, solitary, 30–40 cm long, branching to one order; peduncle c. 15 cm; prophyll c. 10 × 5 cm, cream-coloured; peduncular bracts purplish, 12–15 cm, 20 × 5 cm, 29–38 × 5·5 cm, 40 cm, the most distal beaked, completely sheathing the inflorescence, covered in brown scales; rachis c. 18 cm, with c. 30 spreading to erect rachillae, 2·5–7 cm long, 3·5–5·5 mm across, with lines of red-brown scales; rachis bracts 4 × 1 mm; flowers slightly musty-scented, cream-coloured; pedicels 0·5–2 mm, 2·5–4 mm across; bracteoles 1·5–4 × 1–2 mm, connate with the pedicel for 0·5–1 mm; calyx connate for 0·6–1 mm, 2·8–5 mm across, the free lobes 0·8–2 × 2·6–3 mm; petals 6·5–9·5 × 1·7–2·2 mm, fleshy, 1·5 mm thick, connate by 1 mm through the fleshy base of the antesepalous filaments; ovary ovoid, 3–3·8 × 3 mm; staminodes six, 2·8–3·2 by 1·6–1·7 mm. *Fruit* dark purple (protologue says yellowish at maturity), somewhat depressed globose, 13–14 mm, 15–20 mm across (25 mm according to Beccari), 1–2-seeded; stigmatic remains subapical or terminal; seed ovoid, sometimes flat on 1 face, 9–13 × 6–9 mm; seed coat black, 0·2 mm thick.

Germination remote, eophyll pinnate.

DISTRIBUTION. E Madagascar, only known from Andasibe.

HABITAT. Moist forest, steep slope near crest; 800–1000 m.

SPECIMENS EXAMINED. Moramanga: Analamazaotra, Feb. 1912 (stam., fr.), *Perrier* 12021 (holotype P); idem, Nov. 1986, (stam.), *Dransfield et al.* JD 6418 (K, TAN) and (pist.) *Dransfield et al.* JD 6419 (K, P, TAN) and (seedling) *Dransfield et al.* JD 6420 (K, TAN); idem, March 1988 (stam.), *Dransfield et al,* JD 6485 (K, TAN) and (pist.) *Dransfield et al.* JD 6486 (K, TAN); idem, Dec. 1991 (fr.), *Beentje* 4536 (BH, K, MO, P, TAN); idem, Aug. 1992 (ster.), *Beentje & Andriampaniry* 4745 (K, BH); idem, Dec. 1992 (dead stam.), *Beentje & Andriampaniry* 4769 (K, TAN).

LOCAL NAMES. 'Lakamarefo', 'Siraboto'.

The epithet *madagascariensis* could not be retained, as *Ravenea madagascariensis* already exists (since 1906). The new specific epithet is based on the old genus name, which was given in honour of M. Louvel, in 1912 Director of the Service Forestier and based at Analamazaotra, where the species was first seen, and which is still its only known site.

IMPERFECTLY KNOWN SPECIES

Ravenea nana *Beentje* sp. nov. a congeneribus foliis amplitudine perpusillis foliolis minus numerosis distincta. Typus: Madagascar, prope Andapa, *Humbert & Capuron* 21947 (holotypus P; isotypus K).

Small palm, 3–4 m. *Leaf* sheath 12·9–16 × 1·5 cm, with thin retrograde marginal fibres, densely brown-tomentose; petiole 18–67 cm, proximally 0·5–1·6 × 0·4–1 cm, distally 0·7–1·2 × 0·5–0·8 cm, densely pubescent/tomentose on both surfaces, slightly to deeply canaliculate adaxially, convex abaxially, with sharp edges; rachis (25–) 33–40 cm, in midleaf 6–7 mm wide, with dense grey-brown tomentum on both surfaces; leaflets on opposite sides of the rachis at an angle of 90° with each other, 18–29 on each side of the rachis, the proximal 12–26 × 0·1–1·3 cm (interval 0·8–2 cm), median 16–35 × 0·9–2 cm, without visible ramenta or with dense minute ramenta, acuminate, main vein 1, with scales on margins only; distal 7·5–23 × 0·3–1·5 cm. *Staminate inflorescence* branched to 1 order; peduncle 28+ cm × 0·4 × 0·25 cm, densely brown-pubescent; prophyll unknown; peduncular bracts c. 10 cm, 18–25 cm, 29–40+ cm, 30–40·5+ cm; rachis bract c. 11 × 2 mm; rachis 9–13 cm, with 25–40 branches, lepidote proximally, glabrous distally; rachillae 2–5 cm, 0·5 mm across, straight; pedicel 0·5–1 mm; calyx with very short connate part and lobes 0·8–1·1 mm long; petals 4–4·4 × 1·8 mm, connate for 0·3–0·4 mm by the filament callus of the antesepalous stamens; filaments in 2 series, the antesepalous 0·4–0·5 mm, the antepetalous adnate to the petals for 0·8–1·3 mm, free for 0·2–0·3 mm; anthers 1·5–2 × 0·3–0·4 mm; pistillode 0·6–0·9 mm. *Pistillate inflorescence* 59–92 cm, branched to 1 order; peduncle 35+ –77 cm, proximally 3–6 mm across, distally 2–3·5 mm across, with dense red-brown scales, glabrescent; prophyll 6–15 cm, tattering; peduncular bracts 10–13 cm, 19–38 cm, 57–82 cm, 44–92 cm, abaxially densely lepidote, adaxially glabrous, chestnut brown; non-tubular peduncular bract 4–18 × 0·3–0·5 cm; rachis 6·3–13 cm, lepidote, glabrescent; rachillae 14–27 in number, 1–7·5 cm, 1·2–2 mm across, sinuous; pedicel 0·5–1·5 mm, bracteole 1–2 mm; sepals 1–1·5 mm; petals (fibres only) 2·5–?5 × 1·5–1·6 mm. *Fruit* 1·3–2·1 × 1·1–1·7 cm, one-seeded, stigmatic remains lateral to subbasal. Fig. 6.

DISTRIBUTION. E Madagascar, between Marojejy and Andohahela.

HABITAT. Ericoid bush or ?low forest on rocky sites, gneiss & quartzite; (?400–) 1100–1900 m; the altitude information on the printed label of the type might be wrong; I believe this is a high-altitude species.

SPECIMENS EXAMINED. Andapa: Marojejy, W of Manantenina R., 1700–1900 m, March 1949 (fr.), *Humbert* 23695 (K, P); near Andapa, 400–600 m, Nov./Dec. 1948 (old stam., old pist., y.fr.), *Humbert & Capuron* 21947 (holotype P; isotype K); Mt Beondroka, N of Maroambihy, March 1949 (fr.), *Humbert* 23490 (K, P). Fianarantsoa: Andrambovato, Nov. 1963 (fr.), *Bosser* 18297 (P, TAN). Tolanaro: Mt Papango, Nov. 1928 (y.fr.), *Humbert* 6354 (P).

LOCAL NAMES & USES. None known.

A mystery. Until more is known about its habit and inflorescences (multiple? solitary?), I am unable to include this in any key or discuss its affinities, though it resembles *R. hildebrandtii* from the Comoros. It differs from this species in the much denser tomentum on the leaf-sheath, the smaller leaf rachis, and the larger fruit. I have described the species to draw attention to its existence, and I hope this results in more collections. It is curious that the intensive collecting on Marojejy during the late 1980's did not result in a re-collecting of this species.

FIG. 6. *Ravenea nana*. **A** median portion of rachis with leaflets × ½; **B** portion of staminate inflorescence × ½; **C** staminate flower × 5; **D** portion of pistillate inflorescence × ½; **E** seed × ½. **A-C** from *Humbert & Capuron* 21947, **D-E** from *Humbert* 23695. Drawn by Rosemary Wise.