



3. *Alloschmidia glabrata* at Roches d'Ouaième (Moore et al. 9957).

quam rhachidi brevior. Flores in triadibus dispositi staminibus floris mascula 6 filamentis in alabastro ad apicem erectis antheris didymis pistillodio floris masculi in alabastro quam staminibus longiore apice leviter angulato. Fructus laevis grandis stigmate laterali endocarpio verosimiliter operculato.

**Lavoixia macrocarpa** H. E. Moore, sp. nov. (Figs. 4, 5).

Caules ad 12 m alti. Folia ad 2 m longa pinnis utrinsecus 20–30. Fructus subglobosus ca. 3.8 cm altus 3.1–3.2 cm in diam.

Holotype: *Schmid 4575* (BH).

Moderate, single-stemmed, erect, unarmed, monoecious plams; trunk 8–12 m high, leaf scars not prominent.

Leaves (from photograph) ca. 2 m long; sheaths tubular, forming a short but



4. Habit of *Lavoixia macrocarpa*. Photo by L. Lavoix.

prominent crownshaft; petiole short; rachis more or less arcuate; pinnae between 20 and 30 on each side, regularly arranged, acute.

Inflorescences infrafoliar, several, protandrous, spreading, stiffly paniculate, principal axes rather densely lepidote-tomentose, at least when young; peduncle ca. 18 cm long, 3 cm wide at insertion of peduncular bract, 2 cm wide at first branch; major bracts 2, caducous, the prophyll scar completely encircling the peduncle, scar of peduncular bract ca. 3 cm above that of prophyll adaxially; rachis 53–55 cm long, bearing ca. 22 branches, these once-branched except the uppermost 11–12, lower branches to ca. 37 cm long with peduncular base ca. 7 cm long, rachis ca. 12 cm long, and 7 rachillae to ca. 27 cm long, branches and rachillae decreasing in size distally on rachis, drying granular-roughened; bracts subtending the branches low, rounded or ruffled.

Flowers borne in triads of two staminate and a pistillate subtended by a prominent, projecting, rounded bracteole and somewhat sunken in the axis along the lower  $\frac{2}{3}$  of the rachillae, paired staminate distally; bracteoles surrounding the pistillate flower brown, sepal-like, imbricate: staminate buds smaller than pistillate buds; sepals 3, imbricate, rounded, gibbous dorsally toward base,

ca. 2 mm high, wide, and thick; petals 3, valvate, ca. 1.5 mm high, 2 mm wide; stamens 6, the filaments flat, erect at the apex in bud, anthers didymous from a short connective; pistillode slightly exceeding stamens, expanded in a flat, slightly lobed cap; pistillate flowers ca. 5 mm high and wide; sepals 3, broadly imbricate, rounded, ca. 4–4.5 mm high; petals 3, imbricate, probably with briefly valvate apices, scarcely exceeding the sepals; staminodes 3, dentiform, borne at one side of the gynoeceum; gynoeceum pseudomonomerous, unilocular, uniovulate, the ovule pendulous, curved, probably hemianatropous.

Pollen (fide G. Thanikaimoni, from *Schmid 4575*) monosulcate, never trichotomosulcate, elliptic in polar view; exine finely reticulate; lumina  $0.5 \mu$ ; muri  $0.5 \mu$ ; exine thickness  $2 \mu$ ; tectum perforate  $0.5 \mu$  thick; columella  $1 \mu$  in height; foot layer  $0.5 \mu$  thick.  $L = 40$  (43.11)  $50 \mu$ ;  $l = 22$  (28.7)  $35 \mu$ ;  $h = 28$ – $30 \mu$ .

Fruit subglobose, large, with stigmatic residue lateral at about the middle, ca. 3.8 cm high, 3.1–3.2 cm in diam.; epicarp smooth over a thin shell of short sclereids perpendicular to the surface and a thick parenchymatous layer ca. 1 cm thick lacking tannin cells; endocarp thin, probably operculate; seed not completely formed but apparently laterally compressed.

Specimens examined: NEW CALEDONIA: forêt sur forte pente, versant Est du Mont Panié, vers 500 m, 18 Sept 1966, *M. Schmid 1616* (BH, NOU); Mont Panié, vers 500 m, 1973, *M. Schmid 4575* (BH, holotype; NOU, isotype).

*Lavoixia* has didymous anthers like *Brongniartikentia* and *Clinosperma* Becc. but differs from these genera in having a prominent, tubular crownshaft, infrafoliar inflorescences, and fruit without a tanniniferous layer. It differs further from *Brongniartikentia* in having a thin shell of sclereids beneath the epidermis, lateral stigmatic residue, and staminate flowers smaller than the pistillate. Although keying out to these genera because of the didymous anthers, the relationship is not necessarily close. In aspect, the inflorescence is reminiscent of that of the enigmatic *Cyphokentia humboldtiana* Brongn., but the fruits are much larger, the largest of any species in the *Clinostigma* alliance on the island.

Although incompletely known, it seems unlikely that the genus will prove identical with any other in the *Clinostigma* alliance, to which it surely belongs, and I am therefore describing it as new. The derivation of the epithet comes from the large fruit. The generic name honors M. Lucien Lavoix and his children who discovered this palm on Mont Panié more than a decade ago. M. Lavoix has long had a keen interest in the palms of New Caledonia, the majority of which he has collected and grows at his home on Mont Koghi.

#### VEILLONIA H. E. Moore, gen. nov.

Palmae monoeciae solitariae. Folia pinnata vaginis tubularibus albidis. Inflorescentiae infrafoliales prophylo pedunculum non omnino vaginante pedunculo quam rhachidi brevior. Flores in triadibus dispositi staminibus floris masculi 6 in alabastro inflexis antheris dorsifixis pistillodio floris masculi in alabastro quam staminibus longiore apice rotundato. Fructus minute papillatus stigmate subapicali endocarpio opercolato endospermio homoganeo embryone laterali.



5. Base of trunk and infructescence of *Lavoixia macrocarpa*. Photo by L. Lavoix.