



2. *Alloschmidia glabrata*. a, portion of rachilla with triads, flowers in bud, $\times 4$; b, triad, flower removed to show bracteoles, $\times 4$; c, staminate bud, $\times 10$; d, staminate bud in vertical section, $\times 10$; e, bracteoles, $\times 4$; f, sepal of staminate flower, $\times 10$; g, petal of staminate flower, interior view, $\times 10$; h, stamens in four views, $\times 10$; i, pistillode, $\times 10$; j, portion of rachilla at pistillate anthesis, $\times 4$; k, pistillate flower, $\times 8$; l, pistillate flower in vertical section, $\times 8$; m, sepal of pistillate flower, $\times 8$; n, petal of pistillate flower, $\times 8$; o, gynoecium and staminodes, $\times 8$; p, ovary in cross section, $\times 8$; q, fruit, $\times 3$; r, fruit in vertical section, $\times 3$; s, fruit in cross section, $\times 3$; t, u, endocarp in two views, $\times 3$; v, w, x, seed in adaxial, abaxial, and lateral views, $\times 3$. From material of Moore et al. 9957 preserved in liquid.

Alloschmidia glabrata (Becc.) H. E. Moore, comb. nov. (Figs. 2, 3).

Basselinia glabrata Becc., *Palme della Nuova Caledonia* 77. 1920; *Webbia* 5: 145. 1921.

Holotype: *Hb. Caen* 642 (P).

Single-stemmed, slender, unarmed, monoecious palms; trunk 9–10 m high, ca. 13 cm D.B.H., 7 cm in diam. at base of leaves, with enlarged base and mass of slender, minutely prickly, branched, brown, adventitious roots, nodal scars slightly but not markedly impressed, internodes 9–10 cm long near base, becoming very short at top, cortex brown, more or less longitudinally lined.

Leaves about 10, spreading; sheaths tubular, forming a crownshaft, ca. 70 cm

long, green with dark-centered scales margined with pale hairs when fresh, becoming brownish-green or pale-green and brown-lepidote from persistent scale bases in age, the veins prominent, oblique; petiole short, ca. 15 cm long, rounded beneath, flat above, sharp-margined, with dark-centered, pale-margined, appressed scales when young, becoming minutely brown-lepidote in age; rachis 1.9–2 m long, rounded beneath, angled above, with scales like those of the petiole; pinnae 20–22 on each side, regularly arranged in one plane, acute to acuminate, prominently reduplicate at insertion, 1-ribbed except the sometimes broader and 4–5-ribbed lower pinnae, with thickened lateral and marginal veins, the midrib, veins, and sometimes the surface above minutely lepidote, becoming brown-punctulate, the veins less prominent beneath, minutely brown-lepidote, with scattered basifixed or medifixed, brown, lacerate or fimbriate, membranous ramenta ca. 4–5 mm long, lowermost pinnae 60–75 cm long, 2.5–7 cm wide, produced in a slender lora, median pinnae 1–1.05 m long, 3.5–5 cm wide, apical pinnae ca. 32 cm long, 4 cm wide.

Inflorescences infrafoliar, pendulous, often numerous (to 12), protandrous, green; major bracts 2, yellow-green, caducous, the prophyll completely encircling the peduncle basally, bicarinate, with deciduous, brown-centered scales margined with long pale hairs, appearing villous, 44–52 cm long, 6 cm wide, the peduncular bract included within the prophyll and with similar scales; peduncle and rachis green, with brown-centered, lacerate-margined scales when young, becoming glabrous, peduncle abruptly decurved, ca. 20 cm long; rachis ca. 30 cm long, bearing about 10 branches, the lower pedunculate, twice-branched into 9–12 rachillae, the upper once-branched or undivided, all branches and rachillae subtended by a low, usually rounded bract, with small brown or whitish trichomes in the axils, lower branches 43–50 cm long or more, rachillae 30–45 cm long or more, densely covered with short, stiff, brown or whitish hairs in young bud, becoming glabrous and drying rugulose.

Flowers borne in triads of two staminate and a pistillate flower throughout or nearly throughout the rachillae, sunken in prominent depressions ca. 1 mm deep, with no obvious subtending bract or lip but with minute trichomes on distal side, flowers of both sexes brown, nearly the same size in bud, arranged in a horizontal row, bracteoles dark brown when dry, the outer rounded and slightly shorter than the margin of the depression, the two surrounding the pistillate flower equal, sepal-like, 1.5–2 mm long, exceeding the depression: staminate buds ca. 2 mm high; sepals 3, imbricate, thickened and dark dorsally, ca. 1.8 mm high; petals 3, valvate, ca. 1.4 mm high above receptacle; stamens lilac-violet in bud, filaments markedly inflexed at the apex in bud, anthers dorsifixed, oblong, laterally dehiscent by longitudinal slits, the base (uppermost in bud) divided about one-third; pistillode triangular-columnar with rounded-triangular apex, slightly exceeding the stamens: pistillate flowers ca. 3 mm high at anthesis; sepals 3, broadly imbricate, thickened and dark dorsally, 2–2.2 mm high; petals 3, imbricate with briefly valvate apices, ca. 2.5 mm long; staminodes 3, dentiform, borne at one side of the gynoeceium; gynoeceium pseudomonomerous, ellipsoid, with short recurved stigmas, unilocular, uniovulate, the ovule pendulous, arillate, probably hemianatropous.

Pollen (fide G. Thanikaimoni, from Moore et al. 9957) monosulcate, never trichotomosulcate, elliptic in polar view; exine finely reticulate; lumina 0.5μ ; muri 0.5μ ; exine thickness 2μ ; tectum perforate 0.5μ thick; columella 1.0μ in height; foot layer 0.5μ thick. $L = 36 (46.3) 52 \mu$; $l = 20 (22.95) 28 \mu$; $h = 20-23 \mu$.

Fruit black when mature, ellipsoid, with apical stigmatic residue, ca. 12 mm long, 4-5 mm in diam. when fresh, drying 9-12 mm long, 3-4 mm in diam., falling from the perianth, which persists on the rachilla; epicarp smooth, underlain by tannin cells, a shell of pale, flattish, very short sclereids, a few thin, pale longitudinal fibers, and an inner tanniferous layer; endocarp fragile, minutely alveolate, brown, narrowly ovoid-ellipsoid, with elongate operculum and produced in a basal point: seed narrowly ovoid-ellipsoid, brown, ca. 7 mm long, 3 mm in diam., hilum elongate, in upper $\frac{2}{3}$, raphe branches descending, few, scarcely anastomosed; endosperm homogeneous; embryo lateral, below middle.

Specimens examined: NEW CALEDONIA: Puébo, *Hb. Caen 642* (leg. Vieillard?) (P, holotype of *Basselinia glabrata*, photo BH; BM, isotype; FI (Hb. Becc.), fragments); Puébo, forêt humide sur schistes, crête entre Mandjelia et Salandané, 600 m, 15 Dec 1969, *H. S. MacKee 21277* (NOU P); Haute Hienghène, Ouyit, forêt humide sur crête schisteuse, 600 m, 25 May 1971, *H. S. MacKee 23724* (NOU, P), 1 June 1972, *H. S. MacKee 25556* (BH, NOU, P); Haute Diahot, Paala exploitation forestière Frouin, forêt humide sur micaschistes, 500 m, 1 June 1976, *H. S. MacKee 31303* (BH, P); wet forest, Roches d'Ouaième, between Hienghène and Tao, alt. 240-450 m 21 June 1971, *H. E. Moore, Jr., M. Brinon, M. Schmid, & J.-M. Veillon 9957* (A, BH, K, NOU P, US); forêt en bordure ruisseau, Mt. Ignambi, 28 Nov 1967, *M. Schmid 2516* (BH, NOU); forêt sur pente micaschisteuse, Roches d'Ouaième, vers 500 m, 3 Sept 1970, *M. Schmid 3406* (BH, NOU) Ouégoa, bassin S. W. de la Tendé, en association avec *Burretiokentia*, 31 July 1973, *J.-M. Veillon 3003* (P).

The generic name of this palm is in tribute to M. Maurice Schmid, formerly of O.R.S.T.O.M., Nouméa, New Caledonia, who, in concert with M. Lucier Lavoix, has provided material, notes, and photographs, over the years, and who in 1971 and 1972, arranged for much of my fieldwork and accompanied me on a major trip to the mountains of the northeast coast.

Alloschmidia has the inflorescence enclosed by a complete prophyll, sharing this characteristic among New Caledonian palms of the *Clinostigma* alliance (Moore 1973) with *Brongniartikentia*, *Glinosperma*, *Cyphokentia* (including *Dolichokentia*), and *Lavoixia*.

From these it differs in the fruit with apical not lateral or basal stigmatic residue, in the lateral, not basal, embryo, in the minutely alveolate endocarp with elongate operculum, and in other characteristics of inflorescence, arrangement of flowers, and stamens.

It was originally intended to use a different specific epithet (Veillon 1976, p. 40, *nomen nudum*) taken from the name of a daughter of M. Schmid, herself born in New Caledonia, but study of the type of *Basselinia glabrata* among materials recently received at Paris from Caen shows it to represent *Alloschmidia* and requires the transfer of the epithet from that species.

LAVOIXIA H. E. Moore, gen. nov.

Palmae monoeciae solitariae. Folia pinnata vaginis tubularibus viridibus. Inflorescentiae infrafoliales prophylo pedunculum omnino vaginante pedunculo