

1. Bracts and bracteoles of *Actinokentia* inflorescences in semidiagrammatic drawings. **A**, *A. divaricata*. **Aa**, portion of rachilla with triads from which flowers and fruits have fallen, $\times 2$; **Ab**, triad with fruit removed showing bract subtending the triad, sepal-like bracteoles surrounding the fruit, and third bracteole external to a staminate flower at left, $\times 5$. **B**, *A. huerlimannii*. **Ba**, portion of rachillae with triads before anthesis, $\times 2$; **Bb**, triad with fruit removed showing bract subtending the triad, sepal-like bracteoles surrounding the fruit, and third bracteole external to a staminate flower at right, $\times 5$. **A** from Moore *et al.* 9340 (BH); **B** from Hürlimann 1712 (BH).

Specimens examined: NEW CALEDONIA. Forêt méso-hygrophile de montagne sur serpentine, pente d'une vallée latérale de la haute Ni, 880 m, 25 Jun 1951, Hürlimann 1712 (BH, holotype; Z, isotype); wet forest on slope beside ridge trail on route from Rivière Ngoye at Mine Catherine 7A to Mt. Nékando, ca. 850 m alt., 24 Oct 1978, Moore, Puset, Sevenet, & Veillon 10440 (BH, NOU, Z).

Actinokentia huerlimannii honors Dr. H. Hürlimann, now of Basle, Switzerland, who collected this and many other palms during the botanical expedition of the Mission Franco-Suisse in 1950–52. It may be separated from *A. divaricata* (Fig. 1A) as follows:

1. Petiole short, ca. 18 cm long, channeled above; bracts subtending triads in the inflorescence ascending to nearly erect, acute to acuminate, 5–10 mm long, usually exceeding the flowers; outermost bracteole in the triad about as high as the inner bracteoles; sepals of staminate flowers nearly as high as petals; fruit ca. 3 cm long, 1.3 cm in diam. ----- *A. huerlimannii*
1. Petiole elongate, to 85 cm long, nearly terete in cross section except at the base; bracts subtending triads in the inflorescence spreading, rounded, 2–3 mm long, not equalling the flowers; outermost bracteole in the triad half as high as the inner bracteoles or less; sepals of staminate flowers about half as high as the petals at maturity; fruit 2.3–2.5 cm long, 0.8–1 cm in diam. ----- *A. divaricata*

The description of the leaf is taken from Moore *et al.* 10440, as foliar material accompanying the type is incomplete. Only one individual of this apparently rare species was seen on the trail to Nékando in contrast to the relative abundance of *A. divaricata* from 600–900 m altitude in the thalweg descending the west flank of Nékando to the Ngoye River and elsewhere in the southern part of New Caledonia. The state of the population in the Haute Ni is unknown.

MORATIA H. E. Moore, gen. nov.

Palmae monoeciae solitariae. Folia pinnata vaginis tubularibus et pinnis acutis unicastis. Inflorescentiae infrafoliares prophylo pedunculum omnino vagi-

nante pedunculo quam rhachidi brevior. Flores in triadibus dispositi, floribus masculis anthesis initio quam femineis grandioribus, staminibus floris masculi 6 filamentis in alabastro ad apicem inflexis antheris dorsifixis, pistillodio floris masculi in alabastro stamina aequante apice triangulari. Fructus minute granulatus stigmate laterali endocarpio operculato endospermio homoganeo embryo basali.

Moderate, single-stemmed, erect, unarmed, monoecious palms; trunks stout, usually prominently ringed.

Leaves 8–10, arcuate to spreading; sheaths tubular, forming a prominent crownshaft; petiole rounded beneath, channeled above; rachis rounded beneath, angled above; pinnae regularly arranged, acute, 1-ribbed, coriaceous, with midrib and a vein on each side prominent above and beneath, ramenta prominent on midrib and often on veins toward the base beneath.

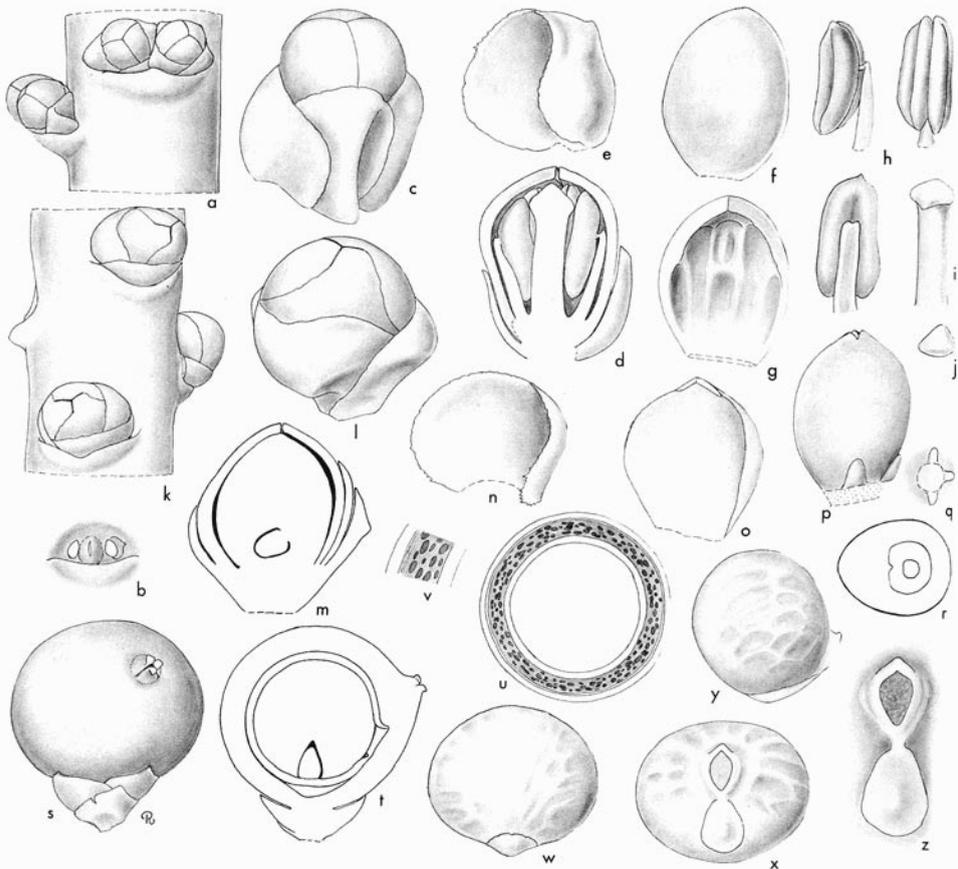
Inflorescence infrafoliar, markedly protandrous, paniculately branched into branches of the third or rarely the fourth order (ax^{3-4}), lowermost branches abruptly divaricate from the rachis at an angle of about 90° ; peduncle shorter than rachis; prophyll completely encircling the peduncle, enclosing the peduncular bract; rachis with 12–15 branches, the lower once- or sometimes twice-branched; bracts subtending branches and rachillae short, acute, bracts subtending triads rounded and spreading; bracteoles surrounding the pistillate flower about equal, more or less sepal-like, about as high as the bract of the triad.

Flowers red: staminate buds symmetrical; sepals 3, imbricate, rounded, gibbous at back and prominently keeled toward base; petals 3, valvate, subacute, impressed internally in conformity with stamens, smooth externally when dry; stamens 6, filaments inflexed at the apex in bud, anthers dorsifixed, oblong in outline, emarginate at apex, briefly bifid at base, with prominent connective; pistillode as high as stamens in bud, angled-columnar, with expanded 3-angled apex: pistillate buds very small at staminate anthesis, at maturity larger than staminate flowers; sepals 3, imbricate, rounded; petals 3, imbricate except briefly valvate apices, prominently tanniniferous; staminodes 3, dentiform, at one side of the gynoeceium; gynoeceium ovoid, unilocular, uniovulate, stigmas 3, reflexed at anthesis, ovule pendulous, hemianatropous.

Fruit depressed-globose, wider than high or thick, with stigmatic residue lateral near the middle, drying with prominent rounded ridges; epicarp very minutely roughened when fresh; mesocarp with a thick layer of pale parenchyma lacking tannin cells external to a thin shell of pale, flat sclereids, these external to a thick layer of parenchyma with abundant tannin cells and a few longitudinal flat fibers; endocarp similar to fruit in shape, rather thick and vitreous, not ridged or angled or sculptured but with discernible pattern of thickened "branches" radiating from the point of seed attachment, this prominent, short, more or less ellipsoid, above a short, subspatulate operculum: seed (not seen mature) with homogeneous endosperm and basal embryo.

Type species: *Moratia cerifera*.

Moratia takes its name from Dr. Philippe Morat, student of monocotyledons and the Malagasy flora, whom I first met some years ago in Madagascar and who, having since moved to New Caledonia, organized the expedition to Mont Panié where we jointly collected the type specimen.



2. *Moratia cerifera*. **a**, portion of rachilla in staminate bud, $\times 3$; **b**, triad with staminate flowers removed to show bracteoles surrounding developing pistillate bud, $\times 6$; **c**, staminate bud, $\times 8$; **d**, staminate bud in vertical section, $\times 8$; **e**, sepal of staminate flower, $\times 8$; **f**, **g**, petals of staminate flower in external and internal views, $\times 8$; **h**, stamens in three views, $\times 8$; **i**, pistillode, $\times 8$; **j**, apex of pistillode, $\times 8$; **k**, portion of rachilla at pistillate anthesis, $\times 3$; **l**, pistillate flower, $\times 6$; **m**, pistillate flower in vertical section, $\times 6$; **n**, sepals of pistillate flower, $\times 6$; **o**, petal of pistillate flower, $\times 6$; **p**, gynoeceum and staminodes, $\times 6$; **q**, staminodes, $\times 6$; **r**, ovary in cross section, $\times 6$; **s**, fruit, $\times 2$; **t**, fruit in vertical section, $\times 2$; **u**, endocarp in abaxial, adaxial, and lateral views, $\times 2$; **v**, section of fruit wall enlarged; **w**, **x**, **y**, endocarp in abaxial, adaxial, and lateral views, $\times 2$; **z**, point of seed attachment and operculum, $\times 3$. From material of Moore & Morat 10400 preserved in liquid.

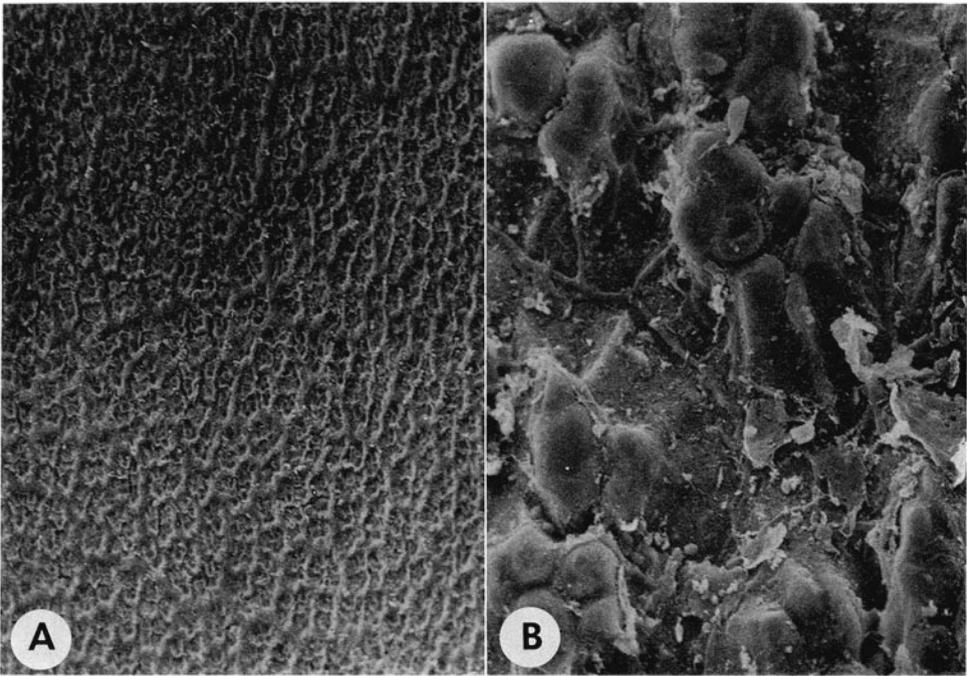
The genus is distinguished from other genera of the *Clinostigma* alliance by its combination of leaves with acute, one-ribbed pinnae and sheaths forming a prominent crownshaft, infrafoliar inflorescences with prophyll completely encircling the peduncle at insertion and enclosing the peduncular bract, sessile staminate flowers oriented horizontally when paired distally, symmetrical staminate flowers with six stamens having filaments inflexed at the apex in bud and pistillode as long as the stamens, minutely roughened fruit with stigmatic residue lateral, and seed with homogeneous endosperm.

Moratia is most closely related to *Cyphokentia*, and like that genus has prominently white-waxy leaf sheaths and prophylls. Moreover, the foliar anatomy is strikingly similar to that of *Cyphokentia macrostachya* Brongn. (Uhl, unpublished)



3. *Moratia cerifera* in bud and young fruit at ca. 550 m on Mont Panié.

as may be the flavonoid chemistry of the leaf (Whalen, unpublished). The differences in staminate flower and fruit in sum, however, are such that to describe *Moratia cerifera* as a species of *Cyphokentia* would be inconsistent with the current circumscription of other genera of the alliance in New Caledonia, e.g., *Brongniartikentia*, *Burretiokentia*, *Cyphophoenix*, *Cyphosperma*. Of particular note is the



4. Stereoscan views of the surface of preserved fresh fruit of *Moratia cerifera* by J. Martens from Moore & Morat 10400. **A**, $\times 50$; **B**, $\times 445$.

minutely roughened epicarp of the fruit in *Moratia* (Fig. 4) and the patterning of the endocarp (Fig. 2w, x, y) among other differences summarized below.

1. Staminate flowers dark red, symmetrical, with sepals about half as high as the thick petals; stamens 6; pistillate flower with 3 staminodes; fruit subglobose, minutely roughened when fresh, with stigmatic residue lateral near the middle; endocarp with discernible thickening in a pattern that resembles the branching of vascular bundles from the raphe of the seed; pinnæ drying light green *Moratia*
1. Staminate flowers pink or rose, symmetrical or somewhat asymmetrical, with sepals about one-fourth as high as the thin petals; stamens 12; pistillate flowers with 6 staminodes; fruit globose-ellipsoid to ellipsoid, smooth when fresh, with stigmatic residue near the base, endocarp lacking discernible patterning; pinnæ drying blackish *Cyphokentia*

***Moratia cerifera* H. E. Moore, sp. nov.** (Figs. 2–4).

Caules ad 20 m alti. Folia ca. 2 m longa pinnis utrinsecus 25–36. Fructus depresso-globosus ca. 1.3 cm altus 1.4 cm in diam.

Holotype: Moore & Morat 10400 (BH).

Trunk to 20 m high, 18 cm in diam., the new growth often orange, becoming brown in age, ringed, without prominent roots, “wood” orangish.

Leaves 8–10; sheath white-waxy over orange to gray-lilac-reddish, orange within, 55–94 cm long; petiole green, brown-lepidote to punctulate beneath, brown floccose-lepidote above, 11–33 cm long; rachis scaly like the petiole, 1–1.7 m long; pinnæ 25–36 on each side, directed forward in one plane or at an angle to the rachis and ascending with arcuate tips, dark green, midrib yellow-