

University, collected *Veitchia Macdanielsii* and *V. Winin* during his visit to the New Hebrides in 1949.

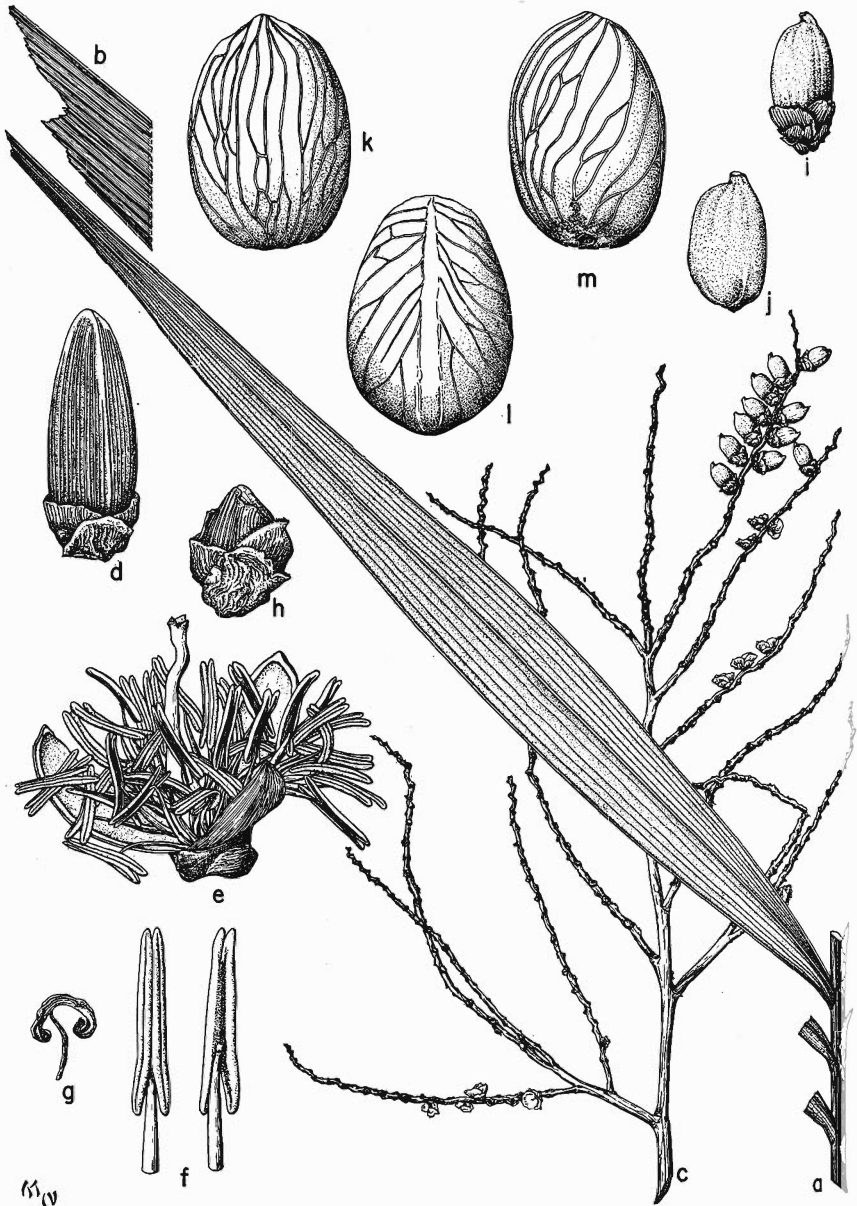
*Veitchia Macdanielsii* appears to be close to *V. Metiti*, Becc., but differs in the smaller fruit and apparently in the panicle. Other comparisons cannot be drawn for *V. Metiti* is known only from a partial panicle and a few fruits. The latter is a palm of the cloud zone at 1000 m. altitude on Vanua Lava while *V. Macdanielsii* is a species from coastal lowlands. Doubtless other differences will appear when *V. Metiti* is better known.

The foliage, at least when newly expanded, has a copious indument of minute pale scales below, resembling *V. Montgomeryana* in this respect. It differs from material which I assign to *V. Montgomeryana* in its small fruit with markedly eccentric stylar cap, in the small seed and in fewer stamens.

† 3. *Veitchia Winin*, spec. nov. Figs. 139, 143.

Pinnæ foliorum subtus pallido-lepidotæ panicula fere ad nodos omnem flores femineos gerens florum masculinorum stamina ca. 50 fructus (14-) 18-19 mm. longus, 9-10 mm. in diametro endospermum non ruminatum.

Large palm, to 20 m. or more high, 17 cm. or more DBH; trunk enlarged at the base (in cultivation), at first densely gray-lepidote then brown: leaves 8-10, 3 m. long, 1.6 m. wide, the sheath 9.7 dm. long, green at base, densely pale lepidote-tomentose above, the scales with deciduous matted white-hairy margins from persistent brown bases, densely clothed with dull deep red-brown twisted membranaceous scales at apex; petiole 2.3-2.8 dm. long, very deep red-brown, densely pale lepidote-tomentose on both sides, slightly concave above, rounded and clothed with dense to scattered dull brown twisted scales below, becoming glabrate and densely brown-punctulate when denuded, rachis rounded and lepidote-tomentose to glabrate and brown-punctulate below, angled and at length brown-punctulate above; pinnæ 46-48 on each side of the rachis, regularly disposed at intervals of 2-5 (-9) cm., the lowermost 1.3-1.5 cm. wide and strongly reduplicate at insertion on rachis, 6.5-7 cm. wide at middle, 41-73.5 cm. long, narrowed to slender tip with blunt vestige of rein, glabrous above, with few brown scales on midvein, minutely deciduous pale lepidote on nerves and lepidote-tomentose or glabrous in age on thickened marginal nerves below, the next borne 9 cm. above, similar but the apex very obliquely toothed and ca. 3 cm. wide, the base more densely clothed with scales on the nerves and floccose but soon glabrous on the surface below; median segments 65-75 cm. long, 1.3-2.8 cm. at insertion, 7.5-11 cm. wide at middle, tapered to oblique toothed apex ca. 4.5 cm. wide, slightly floccose and scaly at base below, glabrous toward apex and above except the marginal nerves, subapical segments 44.5-57 cm. long, 4.5-8.8 cm. wide at middle, 3.5 cm. at apex, apical segments ca. 20.5 cm. long, 5.5-6 cm. along the rachis, 8.2 cm. wide at middle, 4.3 cm. wide at apex: bracts densely white-floccose-tomentose, the outer bract ca. 45 cm. long, 13.9 cm. wide, the inner ca. 43 cm. long, 9.5 cm. wide inserted ca. 3 cm. above outer and 6 cm. from base: panicles ca. 5, to 8.5 dm. long or more, 10 dm. wide, essentially glabrous or punctulate except the densely



143. VEITCHIA WININ. a, pinna  $\times 1/5$ ; b, tip of pinna  $\times 1$ ; c, branch of panicle  $\times 1/3$ ; d, e, staminate flowers in bud and expanded  $\times 3$ ; f, g, anthers fresh and dried  $\times 5$ ; h, pistillate bud  $\times 3$ ; i, j, fruit  $\times 1$ ; k-m, seed, k, antirapheal, l, rapheal, m, lateral view  $\times 3$ : all except e, f, from type, e, f, from Moore 7440.

white-lepidote-tomentose peduncle ca. 15 cm. long, whitish, 3-4 times branched, ultimate rachillæ 8-20 cm. long, the flowers in triads of ♂ ♀ ♂ nearly throughout or paired ♂♂ in apical 2-4 cm.; staminate flowers 10-11 mm. long, the calyx 4 mm. diameter, 3 mm. high, petals 9-10 mm. long, 3.5 mm. wide, stamens ca. 50 about equalling petals, filaments 4 mm. long, anthers 4 mm. long, bifid at base and apex, pistillode attenuate, 8 mm. long; immature pistillate flowers 5.5 mm. high, 4.5 mm. diameter, sepals 3.5 mm. high, petals 5 mm. high, briefly valvate-umbonate at apex, staminodes united into 3, pistil 4 mm. high: fruit (14-) 18-19 mm. long, 9-10 mm. diameter, with eccentrically apical umbo 1 mm. long, fruiting perianth 8 mm. high, the petals about twice as long as sepals, exocarp smooth, red, mesocarp strongly fibrous, endocarp thin, fragile, crustaceous, not adherent to seed; seed ovoid with truncate base, 10 mm. long, 7 mm. diameter, dark brown, the raphe as long as seed, with pale vascular branches ascending from apex and sides in parallel and anastomosing slightly on back, endosperm homogeneous.

New Hebrides: Malekolo Island, opposite Atchin Island, alt. ca. 50 m., December, 1949, *L. H. MacDaniels 3093* (BH, type); occasional in forest, left in cultivation, Le Fabre plantation, alt. ca. 10 m., December 23, 1949, *L. H. MacDaniels 3076* (BH).

Cultivated. United States: Florida; Fairchild Tropical Garden, Coconut Grove, March, 1957, *Moore 7440* (BH).

According to the collector, this species is abundant in the forest on Malekolo Island, where it is known as "Winin." Seed from a tree cut at the Le Fabre plantation was sent to the Fairchild Tropical Garden where a fruiting tree has a trunk now 3 m. high. The panicles on this tree have shorter rachillæ than those of specimens from the wild state and fruit is as little as 14 mm. long. *Veitchia Winin* excels as a cultivated palm. The deep green rather stiffish foliage, pale crownshaft, and masses of whitish flowers followed by an abundance of bright red fruit are highly ornamental. The species is not demanding culturally and commences to fruit after four to six years.

† 4. *Veitchia Merrillii*, (Becc.) trans. nov. Figs. 144, 145, 146, 147.

*Normanbya Merrillii*, Becc. in Phil. Journ. Sci. iv, 606, pl. 30, 31 (1909); Merr. in Phil. Bur. Sci. Publ. v, 127 (1912); Becc. in Elmer, Leaflets Phil. Bot. viii, 3009 (1919).

*Adonidia Merrillii*, (Becc.) Becc. in Phil. Journ. Sci. xiv, 329 (1919); Brown & Merr. in Phil. For. Bur. Bull. xviii, 15, pl. 2,3 (1919) and xxii, 139, pl. 2,3 (1920); Bailey, in Gent. Herb. iii, 435, figs. 251-253 (1935); Fairchild, in Fairchild Trop. Gard. Occ. Paper, i, 1-5 (1938); Becc. & Pichi-Sermolli, in Webbia, xi, 65, fig. 13 (1955).

*Actinorhytis calapparia*, Vidal, Syn. Atlas, 42, t. 94, fig. B (1883), not Wendl. & Drude fide Merr.