

Viti Levu: Serua; hills north of Ngaloa, in drainage of Waininggere Creek, alt. 30-100 m., November 19 - December 3, 1953, A. C. Smith 9198 (BH, type, US, isotype).

A longer petiole, more numerous pinnæ, and small fruit distinguish var. *microcarpa* from var. *Parhamiorum*, the small fruit from var. *vitiensis*. I am least certain that future collections will not require reassessment of the disposition I have made of this material. The fruits are the smallest thus far known for the genus.

† 9. *Veitchia Smithii*, (Burret) trans. nov. Fig. 150B.

*Vitiphœnix Smithii*, Burret, in Bernice P. Bishop Mus. Occ. Papers, 11 (4), 7 (1935).

Stems 16 m. high: leaves 3 m. long, the sheath at first floccose-lepidote with intermixed pale and brown hairs from substellate bases, at length densely and minutely lepidote with shining red-brown substellate scales or with their persistent bases, the petiole more than 16.5 cm. long, 18 mm. wide at base, rounded-triangular and densely appressed-lepidote below and with occasional twisted castaneous larger scales near the margin, the appressed scales with persistent red-brown bases and deciduous pale acicular hairs, slightly concave near the sharp margins above and similarly vestite; rachis very densely and persistently appressed-lepidote with scales similar to those on the petiole, at length probably pale and merely brown-punctate except where protected, pale and angled above with deciduous dark brown and pale hairy scales becoming merely brown-punctate and with occasional dark brown twisted scales on the midline; pinnæ from mid-rachis alternate, regularly disposed at intervals of ca. 3 cm., 32-42 cm. long, 4.5-5.2 cm. wide, slightly sigmoid, broadest at the middle, narrowed at the base to a strongly reduplicate attachment ca. 7 mm. across the orifice, narrowed above to an obliquely truncate toothed apex 1.6-1.8 cm. wide, ca. 3.5 cm. along the oblique margin or the apical pair 2 cm. wide and 10 cm. along the margin, glabrous and glossy above, dull and glabrous below except for twisted castaneous basifixed scales on the midnerve near the base and minute brown scales or their bases on the prominent mid- and marginal nerves, secondary nerves 6-8 on each side of the midrib, prominent above and with a few fine tertiary nerves irregularly interspersed, subapical pinnæ similar but subopposite at intervals of ca. 4 cm., 15-23 cm. long, 1.9-2.5 cm. wide, the apical ca. 10 cm. long, 2.3 cm. wide, truncate: panicle 1 m. long, much ramified, glabrous, the bracts not known, peduncle 5.5 cm. long, 2.5 cm. wide at scar of outer bract, branches ca. 27, the lower stout, to 30 cm. long, 3-4 times branched, central to 18 cm. long, 2-3 times branched, subapical ca. 7 cm. long, once-branched, the terminal 7 simple and 0.7-3.5 cm. long, the ultimate rachillæ all short, 0.7-6.5 (averaging 2.5 cm.) long with 1-8 flowering nodes all of these bearing triads or the terminal 1-2 with staminate flowers only; staminate flowers (in very young bud) with ca. 28 stamens, the anthers deeply bifid at the base and apex; pistillate flowers not sufficiently developed for description: fruit (not completely mature) fibrous-lineolate

when dry, 20-22 mm. long, 7-8 mm. in diameter, obovoid, abruptly narrowed at the apex to an apical or very slightly eccentric styler cap 1 mm high, tapered to a slender constricted base ca. 5 mm. long, subtended by a rather closely appressed perianth 6-7 mm. high, 5-7 mm. across, the sepals 2-3 mm. high, petals not conspicuously dark margined, slightly crenulate, briefly triangular-tipped, staminodes 2-3, broadly dentiform the bracteoles subtending the fruit 0.5 mm. wide or less, flat and inconspicuous; seed 11-12 mm. long, 5.5-6 mm. in diameter, attached along one side and seated at the top of a slender fibrous base 5 mm. high, the vascular branches descending from the apex, more or less parallel and loosely anastomosed, endosperm homogeneous.

Fiji Islands: Kandavu; hills above Namalata and Ngaloa Bays, 200-400 m. alt., October 13-18, 1933, *A. C. Smith 162* (NY, type, GH UC, US isotypes).

*Veitchia Smithii* is distinguished from *V. vitiensis* chiefly by the much ramified panicle with very short divaricate ultimate rachillæ. The fruit resembles that of *V. vitiensis* var. *Parhamiorum*. Collections discussed under *V. vitiensis*, notably *Degener and Ordonez 14765* and material from Bogor, approach *V. Smithii* in having short rachillæ. The relationship between the two species needs close study based on more ample material and field observation.

† 10. *Veitchia petiolata*, (Burret) trans. nov. Fig. 150D.

*Vitiphænix petiolata*, Burret, in Bernice P. Bishop Mus. Occ. Papers, 11 (4), 8 (1935).

Stems 15-35 m. high: sheath, lower surface of petiole and of rachis dark brown furfuraceous or punctate, the petiole more than 25 cm. long rachis lax at the tip but not markedly arcuate-reflexed; pinnæ inserted at intervals of 1.5-2 cm. apparently throughout the leaf, ca. 40 per side directed forward at the narrow base but soon twisted and more or less stiffly horizontal from the rachis, those at the middle of the leaf 55 cm long, 4 cm. wide, coriaceous, broadest near the middle then tapered to a finely toothed obliquely acute apex, glabrous above and below except for a line of dull brown basifixed narrowly linear twisted scales on the midrib near the base and brown-punctate margins, pinnæ progressively smaller toward the apex: panicle pedunculate, thrice-branched, minutely brown-lepidote at least on the major axes, compressed and angled, the ultimate rachillæ nearly straight or slightly flexuous bearing triads of ♂ ♀ ♂ flowers nearly throughout, 10-13 cm. long with 18-27 flowering nodes loosely spiralled below, becoming distichous or nearly so above; staminate flowers 7 mm. long, the calyx spreading when dry but appressed when wet, the sepals ca. 1.5 mm. high, 3-3.5 mm. wide, petals 6.5 mm. long stamens 48-50, the filaments about half as long as the anthers, these 1 mm. long, acutely and deeply bifid at the apex, deeply sagittate at the base; pistillate flowers subtended by conspicuous bracteoles 0.5-1 mm. high: fruit (not completely mature) 18-19 mm. long, 6 mm. in diameter.