

-66

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A New Hawaiian *Pritchardia*

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INTRODUCTION

On a recent trip to Kauai to collect young plants and seeds of *Pritchardia hardyii* and *P. viscosa*, Mr. Paul Weissich and I discovered a distinct new species, immediately discernible as such from a distance. It has the longest spadix of any *Pritchardia* known.

It seems that all species of plants, including *Pritchardia*, found on Kauai are less prone to variation than those found on the other Hawaiian Islands, but are more fixed or stabilized. Kauai is the oldest of the islands. The pritchardias found in the central Koolau Range of Oahu display the greatest variation. In fact, they are so variable that one could describe and name each individual plant. The most distinct species, *P. kahukuensis* Caum, grows on the extreme northwestern end of the Koolau Range, whereas on the central part from Hauula to Waiahole (all on the windward side) is found a very polymorphic species with fruits of all sizes and shapes, ranging from obovate to ovate, elliptical, and globose; but all seem to have the staminal cup included in the hypanthium. In order to designate these plants by a common name, I suggest the specific name *polymorpha* which has been used before to designate a highly variable species (*Metrosideros polymorpha*).

Pritchardias found in the wettest areas of the islands, Kauai excepted, have the largest fruits. When these are transplanted to the drier areas near sea level on Oahu, their fruits greatly diminish in size and shape, so that it becomes impossible to rediagnose them. A case in point is *Pritchardia lowreyana* Rock, from the windward side of Molokai, which I grew from the type tree. I planted a specimen at the

eastern corner of Hawaii Hall at the University of Hawaii in Honolulu, and after 44 years it had produced fruits not, or only slightly, larger than those of *P. affinis*, though in other respects it is quite different from that species. It would be interesting to plant specimens grown from the seeds of the Honolulu *P. lowreyana* in a wet area and see whether it will produce as large fruits as the type. At any rate, the size and shape of the fruits of *Pritchardia* do not appear to be good specific characters. *P. weissichiana* is one of the most distinct of the genus.

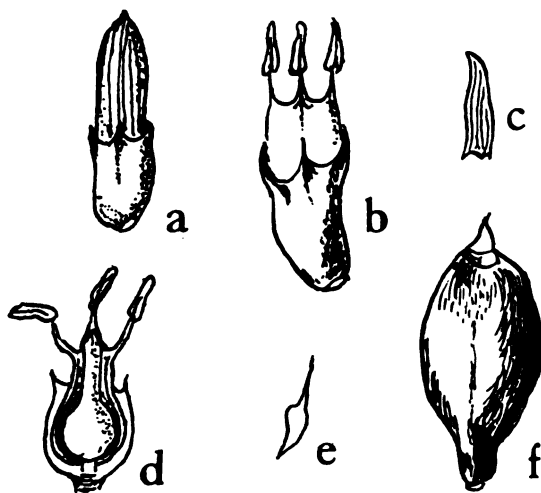


FIGURE 1.—*Pritchardia weissichiana*: a, corolla; b, hypanthium with protruding staminal cup; c, petal; d, vertical section of flower; e, floral bract (a-c somewhat enlarged); f, fruit (immature) natural size.

***Pritchardia weissichiana* Rock, sp. nov. (fig. 1).**

Mediocris, caudice 4-5 m. longo, 30 cm. in diam.; cortice fusco; folia supra fusco virentia, glabra, subtus crebre lepidiis griseis longe-linearibus non fimbriatis conspersa, in parte centrali 1.20 m. longa, 1 m. lata, segmentis 50, profunde 52 cm. bifidis, laciniis lanceolatis, acuminatis, rigidis ad basin 6 cm. latis; spadix 3-4 m. longus fere a basi in 3 inflorescentias partiales divisus, paniculis 23.5 cm. longis, ramulis floriferis non fugaciter dense-floccosis, flores spiraliter alterni; calyce cyathiformi-urceolato, glabro, viride-flavido, 5 mm. longo, 3 mm. late, 3 dentato, corolla quam calyx paullo longiori, urceolo staminali ex ore calycis fere duplo exerto, petalis oblongis acutis; fructus ellipsoideus, attenuatus, 3-3.5 cm. longus, 1.5 cm. latus, apice mucronatus.

A medium-sized palm 4-5 m. high, trunk brownish, smooth, 30 cm. in diameter; leaves semicircular, blade 1.20 m. from ligule, widest part 1 m., segments

50, incised 52 cm. to junction, segments 6 cm. broad at base of junction, long lanceolate to an acuminate apex, non-drooping, dark green, glabrous above, with long-linear confluent gray lepidia below, giving the leaf an ashy-gray appearance; ligule crescent-shaped, only slightly apiculate, somewhat unequal; petiole from base to ligule 1 m. long, 4 cm. broad at ligule, 10 cm. broad at base, concave in its lower half, distinctly ridged in upper two-thirds, leaf base covered with densely matted, pinkish-brown wool, turning gray in the upper part, not easily detachable but dense on both margins of petiole, leaving central part green on both sides; spadix 3-4 m. long, branching into three panicles, the second of which is 2.40 m. and the third 1.80 m. long, erect when in flower and protruding above the crown of leaves for nearly a meter, drooping with fruit; bracts broadly triangular, terminating into a filiform apex; flowering panicles 23.5 cm. long, only the lowest dividing into 2-3 branches, covered with a rufous to salmon-colored tomentum; branchlets 10-12 cm. long; fruiting panicle 42-44 cm. long, covered with a dark rusty-brown to black tomentum; flowers spirally arranged on branchlets; calyx cyatiform urceolate, smooth, green to pale golden yellow, glabrous, dull, 5 mm. long, 3 mm. wide with three sharp teeth; petals oblong striate, acute to acuminate; staminal cup protruding more than one-third length of calyx; fruit (not quite mature) ovate elliptical narrowing to an uneven base, 3-3.5 cm. long, 1.5 cm. wide, dark green, dull, distinctly mucronate, judging by the remains of the style.

Kauai: beyond the ridge which terminates the pole-line trail, overlooking Lihue, altitude 2,500 feet, above the limit of *P. hardyi* Rock, a very much taller palm that is a conspicuous part of the landscape. Collected by Paul R. Weissich in company with J. F. Rock, Frank Morgan, and F. Churchill, February 1962, *type* 27001, in Bishop Museum. It is named for Mr. Weissich, Director of the Foster Botanical Garden of Honolulu, who is interested in procuring all the Hawaiian *pritchardias* for planting in the Foster Botanical Garden.

Pritchardia weissichiana resembles *P. hardyi* in fruit only; it is a third longer, elliptical-obovate, and crowned by a longer mucro. Its nearest relative is *P. kahukuensis* Caum, from the northwestern end of Oahu. *P. weissichiana* is at once distinguished from other Hawaiian *pritchardias* by the long spadix, which extends a meter or so above the large crown of leaves when in flower; by the long staminal cup, which protrudes more than one-third the length of the calyx; and by the larger fruit, which is thickest at the middle rather than at the apex, as in *P. hardyi*.

This new *Pritchardia* increases the number found on the island of Kauai to five, four of which are small-fruited. *P. viscosa* has the largest fruits of any *Pritchardia* known from Kauai.