

branched to 2 or 3 orders, rachillae glabrous; fruits 20–30 × 20–25 mm, globose to ellipsoid.

Distribution: Moist forest on Lanai and the southern and southeastern slopes and valleys of the Puu Kukui massif, West Maui, 300–900 m elevation.

I could find no reliable characters to separate *Pritchardia glabrata* from *P. elliptica* and *P. lanaiensis*; thus, with the inclusion of these in synonymy, *P. glabrata* is another of the four Hawaiian species that is recorded from more than one island.

Pritchardia glabrata is difficult to distinguish from *P. remota* and *P. waialealeana*. All three share the undulate leaf blades incompletely covered abaxially with lepidia and with drooping segment tips, inflorescences shorter than or equaling the petioles with panicles branched to three orders, glabrous rachillae, and small fruits. Both the latter species, however, differ in their generally larger habit. Also, *P. remota* differs in its slightly waxy glaucous leaf blades while *P. waialealeana* differs in the lack of cottony hairs or mealy indumentum on the abaxial folds of its leaf blades and the longer-than-wide fruits.

The holotype of *Pritchardia lanaiensis* at FI is unnumbered while the isotype at BISH has a Rock number, probably one that Rock added later to Munro's specimen. Rock not

infrequently added his or some other number (perhaps a number from a herbarium numbering system) to other collectors' material.

Specimens Examined. U.S.A. Hawaii. Maui (W. Maui): Iao Valley, *Flynn* 2699 (PTBG), *Perlman* 12969 (PTBG), *Rock* 12801 (BISH), 14077 (FI), *Wood* 256, 257, 7586 (PTBG); upper Waikapu, *Wood* 7579 (PTBG). Lanai: Haua Gulch, *Palea* Ridge, *Perlman* 16386 (PTBG), *Wood* 7526 (PTBG); Kunoa Valley, *Munro* s. n. 18 October 1927 (BISH), *Munro* 221, 350 (BISH), *Perlman* 16388, 16392, 16394 (PTBG), *Wood* 7517 (PTBG); Kunoa Ridge, *Wood* 7530 (PTBG); Mauna Lei Gorge, *Hobdy* 208 (BISH), *Munro* s. n., March 1918, 56 (BISH), *Rock* 17242 (BISH); 3rd valley east of Kaiholena, *Munro* 202 (BISH); Waialala, *Perlman* 12938, 16382, 16384, 16385 (PTBG); mountain at east end of island, *Munro* 245 (BISH). CULT. U.S.A. Hawaii. Maui: Kahanu Garden, Hana, *Flynn* 5797 (PTBG), *Lorence* 7668 (PTBG). Oahu: Waimea Valley Audubon Center, 88s168, *Zona* 1004 (HAW).

Pritchardia gordonii Hodel sp. nov., Frontispiece and Figs. 13–15.

P. schattaueri affinis sed inflorescentibus quam petiolis longioribus et fructibus latioribus quam longioribus differt. Typus: U.S.A. Hawaii. Honopue Gulch, Kohala Forest Reserve, Hawaii, *Hodel et al.* 2010 (Holotypus BISH).

12. *Pritchardia glabrata* occurs on Lanai, Hawaii (where it was formerly known as *P. lanaiensis*), as here on the dry, nearly vertical sides of Hookio Gulch in January 1980.



Trunk to 20 m tall (Fig. 13), 25 cm diam., longitudinally grooved, faintly ringed, internodes 7.5–10 cm. Leaves 25–30, erect to spreading; leaf bases to 50 cm long, 23 cm wide proximally, tapering to 7.5 cm wide distally; petioles 75–125 cm long, 7.5 cm wide at base, 3.5–4 cm wide and 1.2 cm thick at blade, convex adaxially, rounded abaxially, margins sharp and proximally with moderate to abundant, tan fibers, densely covered abaxially with whitish, mealy indumentum; hastula semicircular, 1.2 cm high, blade 1 × 1.5 m, costapalmate for ca. 23 cm, deeply divided into ca. 70 segments, middle-lateral ones the largest, to 92 × 5 cm, free apical portion to 46 cm long, these bifid for 41 cm, tips pendulous, long-acuminate, glossy light green adaxially, light green and sparsely dotted with minute scales abaxially, whitish indumentum on petiole extending onto segment folds abaxially, most proximal segments 46 × 0.5–1 cm, ribbon-like, pendulous. Inflorescences 6–10, interfoliar, to 1.2 m long, arching (Fig. 14), slightly shorter than or equaling petioles in flower, equaling or exceeding petioles but shorter than leaf



blades in fruit, composed of up to 3 long axes each terminating in a panicle, peduncles arising from a common base and sheathed by a common prophyll, middle axis the longest, to 1 m long, each axis rounded, 1.6 cm diam.; prophyll to 30 cm long, 2-keeled, 5–7 cm wide and 1 cm thick, 1st peduncular bract attached 6 or 7 cm distal of prophyll attachment, to 45 cm long and sheathing the bases of the 3 axes, up to 7 additional peduncular bracts per axis, brown, papery, moderately covered abaxially where protected with scales to 3 mm long, proximal bracts lanceolate, acute, ± tightly sheathing, distal bracts broadly lanceolate, inflated, loosely sheathing, most distal bract the smallest, to 12.5 cm long and equaling second most distal bract, both extending on to and covering ca. 1/2 of panicle; panicles branched to 2 orders, rachis to 13 cm long, proximal branches with sub-peduncle 2.5–3.5 cm long, sub-rachis 2.5 cm long and with up to 4 rachillae each, distal branches simple rachillae; rachillae to 13 cm long, 2 or 3 mm diam., terete, strongly flexuose, all parts of panicle glabrous, bracts subtending rachillae and panicle branches 5 × 0.8 mm. Flowers 5–8 mm apart; in bud 10 × 5 mm, at anthesis 12 × 12 mm, yellowish green; calyx 7.5 × 7.5 mm, coriaceous, sepals imbricate at the apex, mucronate; corolla tubular, greatly exceeding calyx, lobes 8 × 3 mm, lanceolate, acute, light green, prominently nerved adaxially, faintly nerved abaxially; staminal tube exerted 2 mm above calyx, stamens spreading, borne on filaments 1.5 mm long, anthers 3–4 mm long, oblong, dorsifixed near base; pistil 7 × 3 mm, spindle-shaped, ovary 3 × 3 mm, style 4 mm long, exerted 5 mm above staminal ring, columnar, tapered apically, bottom of pistil seated 3 mm above bottom of calyx. Fruits 50 × 60 mm, oblate (Fig. 15), dark brown to black; mesocarp 13 mm thick; seeds 32 × 32 mm.

Distribution: Moist to wet forest on very steep slopes, Kohala Mountains, Hawaii, 400–500 m elevation.

Pritchardia gordonii is known from only about 23 mature palms in two populations about 100 meters apart. The more southerly population consists of about eight mature palms and several juveniles and seedlings while the northerly population includes about 15 mature

13. Leaf blades of *Pritchardia gordonii* are glossy light green, deeply divided, and with pendulous segment tips (Hodel 2010, holotype).

14. The arching inflorescences of *Pritchardia gordonii* are slightly shorter than or equaling the petioles in flower (Hodel 2010, holotype).



15. Fruits of *Pritchardia gordonii*, among the largest in the genus, are wider than long (Hodel 2010, holotype).



palms. Associated genera include *Metrosideros*, *Perrottetia*, *Tetraplasandra*, *Urera* and *Xylosma*.

Threats to the survival of *Pritchardia gordonii* include rats and invasive, exotic weeds such as strawberry guava (*Psidium cattleianum*), Indian fleabane (*Pluchea indica*) and assorted grasses. The conservation status of *P. gordonii* is probably best considered endangered because of the small number of mature palms and the threats to their survival. It is apparently cultivated in Wahiawa Botanical Garden (HBG 73.0074) of the Honolulu Botanic Gardens system on Oahu from the late Earl Bishop's 1973 collection.

Pritchardia gordonii is very similar to *P. schattaueri* from South Kona, near the opposite end of the island of Hawaii. They share the very tall habit, leaf blades incompletely covered abaxially with lepidia and with pendulous segment tips, glabrous rachillae,

and large fruits. *Pritchardia schattaueri* differs, however, in its leaf blades with broader and less deeply bifid segment tips (resulting in the tips appearing less dramatically pendulous), inflorescences shorter than or about equaling the petioles, and longer-than-wide fruits.

The name honors Rick Gordon, co-collector of the type, who for 40 years has been the ditch man for the Kohala Ditch Company and later the Surety Kohala Corporation that supplied water to sugar cane and other consumers in the Kohala area of Hawaii. More recently Rick has also been responsible for trail and cabin maintenance in the Kohala Forest Reserve for the State of Hawaii, Department of Land and Natural Resources, Division of Forestry and Wildlife. Since the late 1960s, Rick has been aware of these palms, developed a special fondness for their conservation and protection and brought them to the attention of others.

Specimens Examined. U.S.A. Hawaii. Hawaii: Kohala Forest Reserve, ca. 100 m down steep, east-facing slope of Honopue Gulch, 19 July 2006, D. R. Hodel 2010 (with R. Gordon, J. Marcus & K. Morris) (BISH); Bishop 1831 (HAW).

Pritchardia hardyi Rock, Mem. Bernice P. Bishop Mus. 8: 61. 1921. Type: Power Line Trail, Kauai, Hawaii, Rock 17296 (Holotype BISH!, isotypes FI, GH).

Pritchardia weissichiana Rock, Occas. Pap. Bernice P. Bishop Mus. 23: 62. 1962. Type: Power Line Trail, Kauai, Hawaii, Rock s. n., 19 Jan. 1962 (Holotype BISH!).

To 10 m tall; proximal margins of petiole with only a few fibers; leaf blade flat, divided 1/2, abaxial surface completely covered with lepidia and appearing silvery grayish white, segment tips stiff; inflorescences composed of 2–5 panicles, equaling or exceeding leaf blades in flower (Fig. 16), greatly exceeding leaf blades in fruit, panicles branched to 2 or 3 orders, rachillae clothed with dense, felt-like indumentum or glabrous; fruits 20–35 × 15–16 mm, ellipsoid to obovoid.



Distribution: Wet forest below the Waialeale massif near and along the Power Line Trail in east central Kauai, 500–750 m elevation.

Pritchardia hardyi is distinctive in its leaf blades completely covered abaxially with lepidia, inflorescences equaling to exceeding the leaf blades in flowers and exceeding them in fruit, and small fruits. It is similar to *P. viscosa* but the latter differs in its viscous panicles and inflorescences shorter than the petioles. The photograph of *P. hardyi* in Beccari and Rock (1921, Pl. XIII A) actually depicts *P. waialealeana*.

Specimens Examined. U.S.A. Hawaii. Kauai: Power Line Trail, Bishop 1280 (HAW), Herbst 2851 (HAW), Read 87-206, 87-207, 87-208, 87-210 (PTBG), Rock 17296 (BISH), Rock s. n. 19 Jan. 1962 (BISH), Wood 229, 230, 231 (PTBG); ridge between Kahili and Kawaikini, Wood 3509 (PTBG); Kahili, Bishop 1275 (HAW); Ioli headwaters, Wood 7963, 7966, 7966-A (PTBG). CULT. U.S.A. Hawaii. Oahu: Wahiawa Botanical Garden, HBG 67.492, Wiser 87-28 (PTBG).

Pritchardia hillebrandii Becc., Malesia 3: 292. 1889 (1890). *Washingtonia hillebrandii* (Becc.) Kuntze, Revis. Gen. Pl. 2: 737. 1891. *Eupritchardia hillebrandii* (Becc.) Kuntze, Revis. Gen. Pl. 3(2): 323. 1898. *Styloma hillebrandii* (Becc.) O. F. Cook, J. Wash. Acad. Sci. 5: 241. 1915. Type: Cult., Honolulu, Oahu (?) or Molokai (?), Hawaii, Hillebrand s. n. or 467 (Holotype B [destroyed, photo at FI!], isotypes K, FI [fragments!]).

Pritchardia insignis Becc., Webbia 4: 219. 1913. *Styloma insignis* (Becc.) O. F. Cook, J. Wash. Acad. Sci. 5: 241. 1915. Type: Cult. Botanic Garden, Demerara, Georgetown, Guyana, Anonymous 7970 and 8800 (Syntypes B [destroyed?], isosyntypes FI [photos!], K).

To 8 m tall; proximal margins of petiole with only a few fibers; leaf blade strongly undulate and often of a rather coarse appearance, divided 2/5–1/2, conspicuously waxy-glaucous (Fig. 17), grayish green, rarely to nearly white

16 The flat, stiff leaf blades completely covered abaxially with lepidia and appearing silvery grayish white and inflorescences equaling to greatly exceeding the leaves characterize *Pritchardia hardyi* (near Summit Camp, Power Line Trail, Kauai, Hawaii, October 1975).