

55. Fruit and contents, *Salacca edulis*, Bali. Photo P. Allen.

Corozo, *Raphia* and *Manicaria* of the coastal swamps; nor on the other hand is there in America anything quite like the great stands of *Nypa* of the Far East.

P.H.A.

Balinese Salak

Miguel Covarrubias in his fascinating book, *Island of Bali*, has this to say of *salak* (*Salacca edulis*). "*Salak*—a pear-shaped fruit that grows on a palm, tastes like pineapple, and is covered by the most perfect imitation snakeskin." I disagree with him on the taste, as did Paul. The texture and taste are more like that of an unripe but edible pear—hard, crisp, juicy and very refreshing. There are three unequal segments—the largest one contains the only seed. The covering of the fruit is snake-skin-like though not smooth like that of a snake. As can be seen in the accompanying illustrations the tip of each scale protrudes and the feel is prickly. According to my Bali diary, we drove along the east coast road of Bali as far as Karangasem then turned inland and be-



56. *Salacca edulis* fruit cluster, Bali. Photo P. Allen.

gan the ascent of the lower slopes of the volcano Gunung Agung. Looking up the side of the mountain, ahead of us, we could see extensive pure stands of this palm. About 1500 feet elevation we began entering plantations of *salak*. This is a straggly, terribly spiny, silvery palm with no trunk. After a while we stopped along a small, very steep dirt road in a sea of *salak* palms and the little old toothless owner of the planting reluctantly agreed to pose for us with his fruits, even though most of his neighbors looked on and giggled. We saw these palms the last day we were in Bali but strangely enough, in spite of our covering the Island, highlands and lowlands looking for bananas, this was the only place we saw *salaks* growing. The palms may be grown in other countries but we had not seen any of these fruits in the markets until Bali. Our native Bali hotel always served a plate of fresh *salaks* with every meal.

DOROTHY O. ALLEN

Prestoea Allenii —

A New Palm from Panama

HAROLD E. MOORE, JR.

The distinctions between *Euterpe* and *Prestoea* have recently been clarified by the writer (*Gentes Herbarum* 9: 256-262, 1963) and it seems particularly ap-

propriate, now that the proper genus has been determined, to describe a species of *Prestoea* collected in 1946 by Paul H. Allen and to provide for the species an

epithet honoring him. The notes accompanying the specimens are exemplary and although two other species from Panama—*P. roseospadix** and *P. sejuncta* L. H. Bailey—are still incompletely described they clearly belong in *Prestoea* and can be distinguished from *P. Allenii* by combinations of characteristics.

PRESTOEA ALLENI H. E. Moore, sp. nov.

Caules solitarii vel caespitosi ad 12 m. alti. Folia breviter peltolata, vaginis elongatis non scissis, pinnis utrinque ca. 50. Inflorescentiae magnae dense scabridulae, floribus masculis roseis 4-5 mm. longis, fructibus globosis 10-12 mm. diam.

Trunks rarely solitary to usually clustered with 6-10 stems averaging 10-12 m. high, 15 cm. in diam., these ringed, green when young, turning gray in age. Leaves 6-8, tending to twist and become arcuate apically at nearly a 90° angle with the base (Fig. 57), the sheaths forming a very prominently developed purple-black crownshaft; sheath ca. 1.1 m. long, glabrous except scattered brown appressed subentire to fimbriate-margined peltate membranous scales; petiole ca. 27 cm. long, glabrous, rounded below, concave above; rachis ca. 3.4 m. long with ca. 50 pinnae on each side, glabrous basally where rounded below, concave above, becoming flattened and elevated on the upper side and at length nearly deltoid in section at the apex where sparsely brown lepidote or punctulate; pinnae with scattered minute scales on surface and nerves below when young or becoming punctulate, the midnerve prominently keeled above and often clothed above with scattered small appressed brown membranous scales, below occasionally

with few scurfy ferrugineous scales, with 3-4 secondary and numerous tertiary nerves on each side, the marginal nerves somewhat thickened, apices acute or sometimes irregularly divided especially toward the tip of the leaf, the basal pinnae ca. 53 cm. long, 1 cm. wide, lower pinnae ca. 77 cm. long, 2.5 cm. wide, median pinnae ca. 1.18 m. long, 6 cm. wide, apical pinnae ca. 36 cm. long, 2.8 cm. wide. Inflorescences 2-4, infrafoliar, ca. 1.05 m. long; lower bract ancipitous, relatively thin, ca. 42 cm. long, 10.5 cm. wide, glabrous except for pale or brown appressed ceraceous scales marginally, upper bract inserted 8 cm. above the lower, ca. 1.1 m. long, terete in bud, 5 mm. thick, rostrate, more or less densely ferruginous lepidote-tomentose, an incomplete third bract ca. 25 cm. long, 4 cm. wide present at apex of peduncle; peduncle ca. 20 cm. long, 1.8 cm. in diam. at apex; rachis ca. 8.5 dm. long with more than



57. *Prestoea Allenii* (Allen 3531) from Kodachrome by Paul Allen.

**PRESTOEA ROSEOPADIX* (L. H. Bailey) H. E. Moore, tr. nov.

Euterpe roseospadix L. H. Bailey, *Gentes Herbarum* 6: 201. 1943

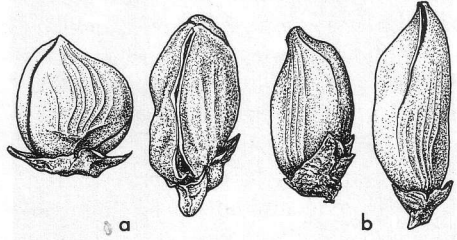
100 white to pinkish pendant rachillae to ca. 73 cm. long, 4 mm. in diam. at anthesis except the thickened base and more slender apex, the rachillae subtended by acute bracts up to 7 cm. long at base of rachis or the bracts only low and crescent-shaped toward the apex of the rachis, both rachis and rachillae more or less densely scabridulous with very short pale shining conic stiff hairs. Flowers in triads nearly to the apex of the rachillae, subtended by very low explanate bracteoles; staminate flowers 4-5 mm. long, pink, the sepals acute, ca. 2 mm. high, thickened basally, petals 4-5 mm. long, 2-2.5 mm. wide, stamens 6, about as high as petals, filaments inflexed at the apex, pistillode ca. 1 mm. high, trifid: pistillate buds ca. 3 mm. high. Fruit globose, black, 10-11 mm. in diam., 11-12 mm. high when dry the stigmatic residue in the upper third, mesocarp thin with a layer of thin flat pale fibers over very thin endocarp adherent to the globose seed, this 8-9 mm. in diam., raphe branches loosely anastomosed; endosperm ruminant; embryo basal.

PANAMA. Prov. de Chiriquí: vicinity of Cerro Punta, 2,000 meters altitude, May 24, 1946, *Paul H. Allen 3531* (BH, holotype; MO, isotype).

Vernacular name: *Maquenque*.

The collector noted that *P. Allenii* is a common palm ranging from 1,500-3,000 meters altitude in heavy rain forest, first found as single-trunked individuals or weakly clustered at about 1,500 meters and attaining maximum development at 2,500-3,000 meters altitude where 6-10 trunks develop from a common base.

In addition to other Panamanian species, there are three or four in Costa Rica and Nicaragua of which only *P. decurrens* (H. Wendland ex Burret) H.



58. Staminate flowers of *Prestoea Allenii* (a) and *P. roseospadix* (b) x 5.

E. Moore seems related to *P. Allenii*. The densely pilosulous inflorescence axes, white flowers with short hairs on at least the center of the sepals and on the tips of staminate petals, as well as smaller stature, long-petiolate leaves, and fruit amply distinguish *P. decurrens* from *P. Allenii*, *P. sejuncta* and *P. roseospadix*.

To supplement the treatment of palms in Woodson and Schery, *Flora of Panama* 2: 373-375, 1943, it may be useful to provide a key to distinguish, so far as material permits, the three species of *Prestoea* in Panama.

1. Inflorescence glabrous, the rachillae slender, 1-2 mm. in diam. at anthesis, 2-4 mm. in diam. at fruit when dry; staminate flowers 5-6.5 mm. long, attenuate, often subsymmetric, the petals about 3 times as long as broad, the sepals scarcely thickened basally; fruit 9-10 mm. in diam.; pinnae with a continuous or almost continuous line of prominent membranous brown-and-white scales on the mid-nerve below; crownshaft not described. *P. roseospadix*
1. Inflorescence densely scabridulous at anthesis (not known at anthesis in *P. sejuncta* but apparently with a residue of scabridulous hairs in fruit), the rachillae 4-6 mm. in diam. at the middle in anthesis and fruit; staminate flowers (unknown in *P. sejuncta*) 5 mm. long or less, abrupt-

ly acute, often markedly asymmetric, the petals scarcely twice as long as broad, sepals thickened basally; fruit 10-12 mm. in diam.; pinnae lacking prominent membranous scales on the midnerve below but sometimes with ferruginous scurfy scales near the base; crownshaft developed or not.

2. Crownshaft not developed; trunk solitary (always?); petiole elongate, 7.5-9 dm. long; pinnae 35-40 per side.

P. sejuncta

2. Crownshaft prominently developed; trunks usually clustered; petiole short, ca. 2.7 dm. long; pinnae ca. 50 per side.

P. Allenii

It is unfortunate that complete comparisons cannot be given owing to lack of information on the crownshaft of *P. roseospadix* and flowers of *P. sejuncta*. The presence or absence of a crownshaft has been used as one of the

criteria to separate *Euterpe* and *Prestoea* and has, in general, been considered a constant generic characteristic. In *Prestoea*, as also in *Pinanga*, the leaf-sheaths may either be closed, forming a crownshaft, or split and not forming a crownshaft, depending on the species, but at the specific level the type of sheath does appear to be constant at maturity. Thus I do not hesitate to separate *Prestoea Allenii* and *P. sejuncta* on this basis despite the lack of flowers of the latter. A very similar palm which I have seen only in sterile condition, grows also in Costa Rica above Finca La Florita some 85 kilometers from San José on the road from Cartago to El General at an altitude of 2,450 meters. From the verbal description, Paul Allen thought that the palms from Costa Rica and Chiriquí might be the same but only an adequate collection of the Costa Rican palm will provide an answer.

Palms at Lancetilla

W. H. HODGE*

To Central American woodsmen, the name *lancetilla*, meaning "little lance," refers to a small slender palm, *Astrocaryum mexicanum*, which is abundant in the wet hillside forests of the north coast of Honduras and Guatemala. The colloquial name is well given for the trunks, and indeed most parts of this species, are covered with a dense armature of sharp blackish spines. These two-edged "little lances," which easily penetrate the flesh, are a constant menace to anyone tramping woodland trails where this palm abounds. To botanists and horticulturists familiar with Central America the name "Lancetilla" means

something else. It brings to mind an outstanding tropical garden located in a small valley of the same name on the northern Honduras coast. Garden and valley share the same name which derives from the abundant *lancetilla* palms to be found on the surrounding hills.

For two reasons it is especially fitting to devote a few pages of this memorial issue of *PRINCIPES* to the Lancetilla Valley and its garden. First of all it was Paul Allen's last base of operations. He was Director of this garden at the time of his passing. Secondly, the garden has (besides its outstanding collection of other economic plants) a notable collection of palms. These, together with the numerous native species—which inhabit the neighboring forests,

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