

6-7, each subtended by a persistent and at length marcescent fertile bract similar to the sterile bracts but progressively smaller and the uppermost scarcely tubular at the base, branches more or less flattened, adnate to the rachis often nearly to the succeeding bract, the lower branches again twice- to once-branched, the upper ones once-branched into slender slightly sinuous rachillae, each rachilla subtended by a linear acute bract.

Flowers perfect, borne singly in a spiral along the rachillae, each on a very short pedicel subtended by a small acute bract; sepals 3, connate in an acutely 3-lobed cupular calyx; petals 3, connate about half their length in a 3-lobed corolla, the lobes rounded and erect at anthesis, probably valvate in bud, stamens 18-24, one or two opposite each sepal, remainder opposite petals, filaments connate basally in a fleshy tube less than half their length, slightly adnate to corolla basally, fleshy and more or less subulate above, anthers oblong in outline, dorsifixed at the middle, versatile, laterally dehiscent by longitudinal slits, exerted at anthesis, bifid at apex and base, carpel 1, excentrically ovoid, narrowed to a slender curved style and oblique papillose stigma, ovule hemianatropous, attached adaxially at the base, the short funicle bearing a prominent oblique aril.

Fruit oblong-ovoid or subglobose with excentrically apical stigmatic residue; epicarp minutely granular-roughened and irregularly beset with minute perforations; exocarp ca. 0.5 mm. thick with sclerosomes; mesocarp ca. 1 mm. thick, white, dry, with anastomosing fibers; endocarp not discrete: seed oblong-ovoid; hilum ellipsoid, subbasal, raphe-branches ascending-spreading; endosperm homogeneous; embryo excentrically basal; germination not known; seedling with undivided, elliptic eophylls.

Type: *Itaya amicorum* H. E. Moore.  
Distribution: Peru, in seasonal rain-forest at low elevations.

Chromosome complement: unknown.

Anatomical features:

Central vascular bundles of the petiole with two phloem strands; late metaxylem elements with simple perforation plates and often a characteristic ligule (Larry Klotz, personal communication).

Foliar and floral anatomy—see Uhl, 1972a & b.

***Itaya amicorum* H. E. Moore, *sp. nov.***  
(Fig. 13A, 15-17).

Caulis ad 5 m. altus foliis 12-20 ad 1.25 m. longis 2 m. latis. Inflorescentia ad 1.25 m. longa. Flores 3 mm. alti. Fructus 2.4 cm. longus.

Trunk to 5 m. high, 9 cm. in diam., gray.

Leaves ca. 12-20, spreading from ascending petioles; sheath ca. 5 dm. long, densely light-brown floccose-tomentose; petiole ca. 2.6 m. long above sheath, brown-furfuraceous basally, minutely deciduous-floccose distally, 1.3-1.4 cm. wide, 7 mm. thick at apex; hastula ca. 1 cm. high, 1.5 cm. wide; blades to 1.25 m. long at middle, 2 m. wide, segments 4-7 on each side, to 1.25 m. long, 9-20 cm. wide at apex, again divided 1-7 cm. deep into segments 0.5-3 cm. wide and bifid to 3-10 mm., upper surface glossy when dry with numerous prominent cross-veinlets, lower surface densely appressed white-tomentose, the principal nerves conspicuously elevated, tomentose or glabrescent, secondary nerves few, not elevated, cross-veinlets evident.

Inflorescence to 1.25 m. long or more, creamy white with brownish bracts at anthesis; peduncle to 2.3 cm. wide near base; prophyll (on a smaller inflorescence) ca. 14 cm. or more long, 2.5 cm. wide, peduncular bracts to ca. 6 dm.

long, 5 cm. wide, split ca. 10 cm. from apex, upper bracts ca. 10 cm. long, all densely pale-brown floccose-tomentose at first, outside fibers longitudinal and dense, inner fibers obliquely transverse, the bracts at length fraying into masses of longitudinal fibers; lower branches to 5 dm. long, pale puberulous, rachillae to 12 cm. or more long, puberulous.

Flowers ca. 3 mm. high when dry, sepals 1.5–2 mm. high, petals ca. 2 mm. high, stamens and style exserted.

Fruit (from *Gutiérrez R. 194*) said to be whitish when ripe, 2.4 cm. long, 2.2 cm. in diam. when fresh but perhaps not completely mature; seed 1.8 mm. high, 1.5–1.6 mm. wide and broad.

Vernacular name: *falso bombonaje*, *sacha bombonaje* (fide *Gutiérrez R.*)

Specimens examined:

PERU. DEPT. LORETO: Prov. Maynas; in forest on trail to Omaguas beyond landing on Río Itaya at Varadero de Omaguas, 13 May 1960, *H. E. Moore, Jr., Adolfo Salazar C. & Earl E. Smith 8447* (BH, USM); Río Itaya, Fundo Ciudadilla, alt. 150 m., 17 Feb. 1965, *Abelardo Gutiérrez Ruíz 194 AGR* (BH); Río Itaya, on Varadero de Omaguas from Fundo Ciudadilla, about 2 1/2 hours by 40 H. P. speedboat from Iquitos, 150 m. alt., 5 Mar. 1967, *H. E. Moore, Jr., A. Salazar C. & A. Gutiérrez R. 9509* (BH, holotype, USM, isotype).

I have taken the name for this genus from the river near which it grows and the epithet from the spirit of the program under which I first encountered it and for my associates in Peru.

*Itaya* appears to be most closely related to *Chelyocarpus* and *Cryosophila* with which it has been contrasted in the key. It is, however, more specialized than either in the connation and adnation of sepals and petals, in its numerous stamens, in its unilocular gynoecium, and in the presence of two phloem strands in central vascular bundles of the petiole. The split in the petiole base

has been commented upon for *Thrinax* by Read (1967). It is an immediately recognizable field difference but one which often cannot be discerned from herbarium material which usually lacks leaf bases. In this feature, *Chelyocarpus* and *Cryosophila* are to *Itaya* as *Coccothrinax* and *Zombia* are to *Thrinax*.

Four fruits near maturity were obtained and forwarded for study by Ing. Gutiérrez R. to whom special thanks are due. They have an epicarp which is marked by numerous apparently natural openings but which is never fractured as in *Chelyocarpus ulei*.

*Itaya amicornum* is thus far known only from the type locality. It is a promising horticultural subject on account of its large and handsome leaves much resembling those of some *Licuala* species, its moderate stature, and its creamy-white inflorescences and flowers. As yet, the species has not been introduced into cultivation.

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I first encountered *Chelyocarpus ulei* and *Itaya amicornum* during the course of a reconnaissance survey of palms in eastern Peru with Ing. Adolfo Salazar C., then with the Programa Co-operativa para el Desarrollo Forestal del Perú, and Dr. Earl E. Smith, then Forestry Adviser, Agricultural Division, United States Operation Mission to Peru, International Cooperation Administration. The reconnaissance was sponsored by the Agriculture Division, USOM/PERU, ICA. A second field encounter with these two genera in 1967 and subsequent work has been supported largely by National Science Foundation grants GB-3528, GB-7758, and GB-20348X. I am indebted to the John Simon Guggenheim Memorial Foundation for the privilege of studying the type of *Thrinax chuco* in 1955. I am also indebted to Dr. A. Lowalree at Bruxelles, to Dr. Alicia Lourteig at Paris, and

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Ing. Flavio Bazan, then Director General of the Servicio Forestal y de Caza of the Ministerio de Agricultura for Peru, and my project companions organized a memorable field experience in 1960. Ing. Bazan and Ing. Salazar, now Dean of the Facultad de Ciencias Forestales, Universidad Agraria, La Molina, Peru, and personnel of the Servicio Forestal greatly facilitated field work in 1967. My indebtedness to my Peruvian friends is expressed in a small way in the epithet used in *Itaya*.

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