

New Species

Licuala cabalionii Dowe, sp. nov. *L. grandi* H. Wendl. ex Linden proxissima a qua lamina foliorum segmentata, caulibus tenuioribus altioribusque, fructibus maturis aurantiacis non carmesinis, et endocarpio parce costato differt. TYPUS: Vanuatu. Malekula: Dowe 048, 5 Sept. 1991 (holotypus BRI). Figures 1-3.

Stem solitary, erect to slightly reclining, to 5 m tall, to 8 cm diam., portion below leaves retaining decaying leaf-bases, proximal portion smooth, light brown/gray. Leaves to 12 in a loose crown; petiole very long and thin, to 3 m long to 1 cm wide in distal portion, irregular marginal spines only at the base; leaf-blade segmented; segments to 12, symmetrically arranged, central segment twice or more times broader than lateral segments which become progressively narrower toward the leaf margins, all segments slightly pendulous. Inflorescence interfoliar, pendulous, to 1.8 m long, five once-branched branches; bracts subtending primary and secondary branches tubular, remaining green during fruit development and maturity. Flowers pedicellate, single, spirally arranged, sepals fused to one-third their length, apex rounded, to 12 mm long, petals fused basally, apex valvate, pointed to 4 mm long. Fruit yellow/orange when ripe, globose, to 10 mm diam.; endocarp brittle with few longitudinal ridges. Seed to 6 mm diam., testa intruding into endosperm below the raphe. Eophyll plicate, leaf dividing early.

Distribution. Vanuatu, on the islands of Vanua Lava (in littoral forest at sea-level on volcanic soils) and Malekula (in rainforest to 250 m above sea level on volcanic soils). Endemic.

Specimens Examined. VANUATU. SOUTH MALEKULA: "Amethyst Camp," 250 m in rainforest on volcanic soil, 5 Sept. 1991, Dowe 048 (holotype BRI).

Typification. Although this taxon had been recognized by the author to be dis-



2. *Licuala cabalionii* in rainforest at altitude of about 200 m at Amethyst Camp, southern Malekula.

tinct in 1988, no suitable sample for typification was available until that collected on 5 September 1991 (Dowe 048, BRI). This collection consists of two leaves (one with petiole) and a complete infructescence with immature fruit. Mature fruit has been seen by the author in the field but no sample of it has been preserved.

Derivation of Name. *Licuala cabalionii* is named for Pierre Cabalion (born 1947), French ethnopharmacologist whose work in Vanuatu has been an important contribution to the Flora of Vanuatu Project.

Licuala comprises about 110 species distributed from northeast India, through southern China, Philippines and southeast



3. Prolific production of seedlings below the "parent" plants is characteristic of *Licuala cabalionii*.

Asia to New Guinea, northern Australia, Solomon Islands and Vanuatu. The genus has developed its greatest diversity in Malay Peninsula and Borneo (about 50 species) and New Guinea (about 36 species). *Licuala* was not recognized as occurring in Vanuatu until 1970, when *L. grandis* was collected from southern Espiritu Santo (Whitmore 1973). Erroneously this species had been documented in numerous publications as originating from New Britain, an island to the east of New Guinea, an error most probably originating from its initial description from a horticultural source.

Licuala cabalionii is distinguished from the closest occurring species, *L. grandis* H. Wendl. ex Linden (distributed throughout much of Vanuatu as well as the Santa Cruz Group and San Cristobal Island of the Solomon Islands) by its divided leaf-blade, less spiny petiole, shorter floral pedicel and sparingly as opposed to multi-ribbed endocarp. *L. lauterbachii* Dammer

& K. Schum. (Solomon Islands and New Guinea) differs in having a short and erect inflorescence, red fruit, and irregularly divided leaf-blade.

The known populations of *L. cabalionii* do not occur close to populations of *L. grandis* although they occupy similar habitats. The former occurs in very dense colonies (almost monospecific) in primary rainforest; the forest floor in the vicinity is thickly cover with seedlings and small plants. *L. grandis* is much less gregarious, with very few seedlings being observed and individuals being relatively widely spaced. *L. grandis* is more commonly found in disturbed or secondary forest. No traditional uses or vernacular names have been recorded for *L. cabalionii*.

Licuala cabalionii has appeared as the manuscript names "*Licuala* sp. Vanua Lava" (Dowe 1989a) and "*Licuala* sp." (Dowe 1989b).

Calamus vanuatuensis Dowe, sp. nov. *C. vitiensi* Warb. ex Becc. et *C.*