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Hybrid in Chrysalidocarpus

THOMAS A. ZANONI

Jardin Botanico Nacional, Santo Domingo, Republica Dominicana

ROBERT W. READ

Department of Botany, U.S. National Herbarium, Smithsonian Institution, Washington, D.C.

In Puerto Plata, Dominican Republic, the garden of the residence of Luis Ariza Julia is well known for its great variety of orchids and bromeliads, including species native to the island of Hispaniola (Haiti and Dominican Republic). A small collection of exotic palms can be found amid the magnificently displayed plants which daily receive his personal attention.

In November, 1983, Mr. Ariza Julia showed the authors several young palms that appear to be hybrids resulting from the cross of *Chrysalidocarpus madagascariensis* var. *lucubensis* (Beccari) Jumelle & Perrier and *C. lutescens* H. Wendland.

The putative hybrids (Fig. 1) apparently arose from spontaneous crossing between the solitary trunked female parent var. *lucubensis* and the clump-forming male parent *C. lutescens*. Two of the hybrid plants were transplanted from the base of the var. *lucubensis* parent to a garden on the adjacent property. A young plant of what appears to be a "pure" *C. madagascariensis* var. *lucubensis* (Fig. 2) was also transferred to the same property. Two of the hybrids remain at the base of the *C. lucubensis* and are not clump forming.

Mr. Ariza Julia reports that his plant of var. *lucubensis* was obtained from a public garden in Jamaica about fifty years ago. His *C. lutescens* was obtained from plants already in cultivation in the Dominican Republic about the same time, just after he had the family residence built. The two species were planted within one

hundred feet of each other. He estimates that the hybrids are about five years old.

The pinnate leaves of Chrysalidocarpus madagascariensis var. lucubensis have the leaflets attached to the rachis at several angles, and are usually in groups of three or four (sometimes singly, or in pairs, or in fives, Fig. 4). The trunk bears its leaf scars in close arrangement (Fig. 3). Chrysalidocarpus lutescens on the other hand, bears its leaflets in a single rank on each side of the rachis and the leaflets do not appear in groups (Fig. 4).



 Sr. Ariza Julia with his young hybrid, a natural cross between Chrysalidocarpus lutescens and C. madagascariensis var. lucubensis.



2. Young plant of Chrysalidocarpus madagascariensis var. lucubensis.

The leaf scars of the trunk are widely spaced. The putative hybrid plants have the leaflets in a single rank on each side of the rachis, like *C. lutescens*, but have the leaflets in groups, like var. *lucubensis* (Fig. 4). The number of leaflets per leaf is intermediate between the numbers in the suspected parents. The leaf scars are widely spaced (similar to *C. lutescens*) on the trunk (Fig. 3).

The hybrid plants have not yet flowered. It should also perhaps be noted here that the putative hybrid plants bear a resemblance to our old friend *C. cabadae*, described from plants found in cultivation in Dr. Cabadae's garden in Cuba some years ago.

This is the first known case of hybrids between these two species of *Chrysalidocarpus*, a genus originally from Madagascar (Malagasy Republic).



 Chrysalidocarpus madagascariensis var. lucubensis on the left. A putative hybrid trunk on right. Note the length of the internodes.



4. Upper leaf, C. lutescens; middle leaf, putative hybrid; lower leaf, C. madagascariensis var. lucubensis.

Note: McCurrach, J. C. 1960. Palms of the World is in error by stating that the "Sex:" of Chrysalidocarpus as a genus

or as the species *C. lutescens* is "Dioecious." In fact, all species are monoecious.