Dichotomous Branching in Allagoptera?

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In the article on dichotomous branching in p a l m s (*Principes* 10:21-29, 1966) by Tomlinson and Moore it was suggested that the phenomenon remains to be discovered in other palms. We are indebted to Mr. W. L. Bidlingmayer of Vero Beach, Florida for a prompt response to this suggestion. He draws my attention to Allagoptera arenaria (Gomes) O. Kuntze (*Diplothemium* maritimum Martius) in which he has observed division of the crown in a specimen in his own collection. I continue with Mr. Bidlingmayer's own words.

"The plant is mature, about 7 years old and has produced seed for the past 2 years. This summer I discovered a mature leaf with the rachis divided equally for about a quarter the distance from the apex. Both midribs have leaflets. When the plant was about twothirds grown the bud divided equally as seen in *Hyphaene*. It now has two equal but closely appressed buds."

A plant cultivated at Fairchild Tropical Garden shows exactly the features described by Mr. Bidlingmayer and seems to have dichotomized in the same way. It is illustrated in the accompanying figures (Fig. 1-3). The leaf with the forked midrib (Fig. 3) appears to be the last leaf below the fork. Its petiole is grooved on two sides, suggesting pressure exerted during its early development by the two new buds. The arrangement of leaves in the two new buds suggests that they have mirrorimage symmetry with respect to each other, an apparent essential feature of this type of branching.

Allagoptera arenaria grows in some abundance in its native habitat and is quite accessible (for an account see W. H. Hodge. "A strand palm of southeastern Brazil." *Principes* 8:55-57, 1964). It should be possible to discover if this dichotomy is characteristic of the palm and look for early stages by dissecting out developing parts.

Mr. Bidlingmayer is to be congratulated on his discovery, particularly as it means that this dichotomouslike branching is now known for another of the major subfamilies of palms, the Cocoideae. I am also indebted to Mr. Bidlingmayer for allowing this note to be published.



3. Allagoptera arenaria, the forked midrib (arrows) of the leaf immediately below the dichotomy. Photo M. V. Parthasarathy.