

geny and morphology are beginning to recognize that the angiosperms must have already been very old by Lower Cretaceous times. The palms, it seems, probably represent one of the oldest major groups of angiosperms living today. The palm tree may perhaps mean

more to us than a plant of magnificent form and stately beauty but an example of a tree that has lived very long and is reminiscent of long ages past when flowering plants were "growing-up" to be a dominant element in the plant world.

Chamaedorea Radicalis

An unidentified palm, seed of which had been inadvertently introduced with that of *Collinia elegans* from Mexico, was flowering and fruiting at the Fairchild Tropical Garden and at Vero Beach, Florida, when I visited there this spring. The species had a familiar look and was tentatively identified as *Chamaedorea radicalis*. Thanks to the kindness of Edwin Johnston, Stanley Kiem, and Nat De Leon, who provided study material of mature fruit and of both sexes in flower, this determination is confirmed.

Chamaedorea radicalis occurs in eastern Mexico from the mountains of Tamaulipas south into Hidalgo so far as is known. It was described in 1849 by Martius who had received specimens collected by Karwinski, perhaps from the same place on the road from Victoria to Jamauve in Tamaulipas where it may be found today. I have seen it growing there together with *Brahea Berlandieri* and *Brahea Moorei* in the shade of oak forest and again, with the same two species, in oak-cedar woods on the trail from Jacala to Barranca de Tepetates in the state of Hidalgo not far from the Pan-American Highway. Specimens collected at Tamosopo Canyon in the state of San Luis Potosí were given the name *Chamaedorea Pringlei* by Sereno Watson in 1891 but prove to be the same as the earlier *C. radicalis*.

Stems of this species are ordinarily very short and for the most part underground or lying on the ground though plants are said to reach a height of six feet on occasion. In nature the species did not appear to sucker freely but plants in cultivation are starting to produce additional crowns. Several leaves to three feet long with 10-18 pairs of slender dark green pinnae to 14 inches long, 3/4 inch wide are rather stiffly erect, arching toward the tip. The inflorescences rise from outside the outer leaves. Their long peduncles nearly equal the leaves and are sheathed with papery brown tubular bracts. Rachillae may be only one (frequently so in female plants) to as many as nine but are most often two or three. The deep green flowers of male plants are borne in lines of 2-3 in close proximity spiralled about the rachilla while flowers of the female plants are always solitary and spiraled. Fruit is about 3/8 inch in diameter, at first green but eventually becoming bright orange-red.

Although *Chamaedorea radicalis* is a coarser species than *Collinia elegans* it may prove more adaptable to Florida conditions due to its preference for limestone areas and its presumed ability to withstand drier conditions than species from the moister forests.

H.E.M.