Abstract

Part one of the thesis describes the history, distribution, ecology, morphology and cytology of Thrinax (Palmae) in Jamaica. The examination of a large number of living plants has shown that many quantitative characters, formerly believed to be important in distinguishing species, represented random selections from clinal patterns and are therefore of little value in distinguishing taxa. Characters described for the first time, e. g. leaf sheath, blade, colour and puberulence of the inflorescence, have proven to be of great taxonomic importance. Particular attention is given to the variability of Thrinax parviflora over a wide range of climatic conditions and its unusual behaviour in special situations in the Cockpit Country and on the slopes of Mt. Diablo. The haploid chromosome number (determined at pollen-tube mitosis) of the three Jamaican species is 18. Little difference in size or morphology of the chromosomes exists among the taxa.

The taxonomic portion (Part Two) treats the genus Thrinax and its three species indigenous to Jamaica. The section on each taxon includes literature references, synonymy, a description and list of specimens examined. Thrinax tessellata Becc. and T. harrisiana Becc. are synonymous with T. parviflora Sw.; Thrinax excelsa Bailey not Griseb., T. parviflora Bailey not Sw. and T. wendlandiana Becc. are synonymous with T. multiflora Mart.; Thrinax rex Britt. and Harris is synonymous with T. excelsa Lodd. in Griseb.