A TAXONOMIC MONOGRAPhic
OF THE CYCADS

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Edited, Completed, and Revised by
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PREFACE

The plan and purpose of the present work were set forth by the author in a preliminary announcement, submitted a few weeks before his death to Chronica Botanica, and published in the December, 1943, issue (vol. 7, pp. 438-440) together with a short biographical sketch. Some of the ideas expressed in this announcement are restated herewith in the introduction. In preparing the monograph for publication, the editor has endeavored, so far as possible, to carry out the author's aims and to complete the work in much the same way as he would have done. This has been difficult because of the condition of the unfinished manuscript and of a lack of directions for its completion.

Dr. Chamberlain had made a detailed study of many species of cycads, both in the field and under cultivation. He had assembled copious notes, dried specimens, material preserved in liquid, and many photographs. He had finished writing the descriptions of practically all the species of which he possessed a first-hand knowledge. Because this work was done carefully, over a period of almost forty years, the editor has accepted most of the author's statements without feeling that they should be corroborated by an extensive reexamination of specimens of the considerable number of species not studied by Dr. Chamberlain in the field, greenhouse, or botanical garden, he had described from data published by authors whom he knew and in whom he placed a great deal of confidence. Other species, mostly belonging to Cycas, Encephalartos, and Zamia, he had not described at all. The editor has written descriptions of these species, basing them on data available in the literature and supple-
mented, wherever possible, by additional facts obtained from
the examination of specimens. The original descriptions of
practically all these species have been consulted. Exception-
ally, the original descriptions are so complete that they are
almost quoted with no changes. As a rule, however, they
are very incomplete, having been based on mere fragments sent
in by collectors in distant places. In fact, the original
descriptions are frequently so inadequate, that it is not
possible to recognize the species being described. Because of
insufficient data, some of the descriptions in the monograph
are brief, but their inclusion will at least make possible the
identification of species which, it is hoped, will later be
described in greater detail by botanists having access to abundant
living material.

The editor has prepared the diagnosis of the family, all
generic descriptions, the analytical keys, and the citations to
the literature. He has been compelled to rewrite all descriptions
of species prepared by the author, not to alter statements, but
to arrange them in a logical sequence and to make the descriptions
consistent throughout in terminology, style, and other respects.
Wherever additional facts could be added, this was done. The
introduction is almost entirely in the author's words, but the
section on relationships and distribution was written by the editor.
The ideas here expressed, however, are those with
which the author would have been in agreement. The general account
of vegetative organs is a condensation and reorganization of several
chapters which Dr. Chamberlain had written for a later work. The
section dealing with cones and sporophylls has been added by the
editor.
Although the author's views on nomenclature were somewhat unorthodox, his choice of names, with few exceptions, has been preserved. *Encephalartos caffer*, the name which he insisted on applying to a species which should be designated *E. longifolius*, is rejected entirely and not applied to *E. brachycnemus*, as is done by certain other authors. This change is made in an effort to straighten out a very confusing situation. *E. longifolius* is the species called *E. caffer* in all the author's other writings.

Dr. Chamberlain had indicated only a few of the illustrations which he had planned to use in the monograph. But from his collection of hundreds of photographic prints and thousands of negatives, it was possible to select and to prepare the many illustrations appearing throughout the book. Wherever possible, illustrations not previously published by the author have been selected. Although most of them have been prepared from photographs made by the author, those known to have been furnished by others are acknowledged in the accompanying legends. Wherever such acknowledgment may be lacking, the editor was unable to learn the source of the illustration.

The editor has undertaken to finish and prepare for publication Dr. Chamberlain's manuscript in order to preserve and make available the results of his extensive studies. It may be said to represent a fairly comprehensive account of the known cycads of the world. Future research may be expected to establish the identity of a number of species now regarded as doubtful and others that are still undiscovered. Such investigations cannot be carried on merely by an examination of fragmentary herbarium specimens, usually representing parts of leaves, and of dried cones and seeds. They must be based on extensive observations of living plants in the field. It
is hoped that the present monograph will be useful, both to the general student who wishes to become familiar with the known species of cycads, and to the investigator who will have an opportunity of making additional contributions to our knowledge of this ancient and interesting family of plants.

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