

2
Botany

580.542
787

THE

JOURNAL OF BOTANY

BRITISH AND FOREIGN.

EDITED BY

JAMES BRITTEN, K.S.G., F.L.S.

LATE SENIOR ASSISTANT, DEPARTMENT OF BOTANY, BRITISH MUSEUM.

VOL. L.

ILLUSTRATED WITH PLATES AND BLOCKS

223620

LONDON

WEST, NEWMAN & CO., 54, HATTON GARDEN.

1912.

much influenced by the views of relationships put forward by Dr. Hallier. In his treatment of the second great group of seed-plants, he starts from the *Polycarpicæ*—Hallier's Proterogenes—which includes the following families: *Anonales*, *Piperinæ*, *Ranales*, *Nepenthales*, *Aristolochiales*, *Rhæadinæ*, and *Hamamelinæ*. But while practically accepting Hallier's definition and views of relationship of these families, Dr. Lotsy breaks into the series by deriving from two different portions of it the great group of the Monocotyledons.

Incidentally he discusses the origin of Monocotyledons, and while fully agreeing with Miss Sargent in deriving them from dicotyledonous ancestors, he cannot admit that all Monocotyledons are syncotylous. Heterocotylly must also be considered, and in this respect, for instance, he regards the *Gramineæ* as retaining a trace of the second cotyledon in the epiblast. In a word, the Monocotyledons are not monophyletic, but have been derived by at least two paths of descent from the Dicotyledons. Hence, in Dr. Lotsy's arrangement, the spadicifloral Monocotyledons follow the Piperales, while the rest of the group finds its place immediately after the Ranales. In the arrangement of the second and larger phylum he follows Wettstein, and begins with the *Helobiacæ*, of which *Alismaceæ* is regarded as the most primitive order; next come the *Liliifloræ*, in which the type reaches its strongest development, and from which extreme adaptation to insect pollination has led to the development of the *Scitamineæ* and *Gynandracæ*, and extreme adaptation to wind-pollination to the development of the *Glumifloræ*. A departure from Wettstein's arrangement is the derivation of *Enantioblastacæ* from *Helobiacæ* and not from *Liliifloræ*.

It must not, however, be supposed that, in starting with the *Polycarpicæ*, Dr. Lotsy is convinced of the superior antiquity of this series as compared with the *Monochlamydeæ*. The question is broached in his introductory chapters on the angiospermous flower, but is left unanswered. Dr. Lotsy returns to it in the last chapter after a discussion on the definition and constitution of the *Hamamelinæ*, and on *Casuarina* and *Juliana*. But he can arrive at no decision. Facts are wanting to decide between the two opposing views, each of which embraces alternatives. Is the angiosperm flower a strobilus and derived from a unisexual Cycad flower, or from an hermaphrodite strobilus like that of *Bennettites*? Or is it an inflorescence, and to be derived from *Bennettites* (supposing, with Lignier, the *Bennettites* fructification to be an inflorescence), or, as Wettstein has suggested, from *Ephedra*-like ancestors? The author can only reply, "Ich weiss es nicht."

A. B. R.

BOOK-NOTES, NEWS, &c.

THE announcement in April last of the death of CHARLES DU BOIS LARBALESTIER, at St. Helier's, Jersey, must have come to many like an echo of far-away days. He was one of a group of keen field botanists who, between forty and fifty years ago, devoted

themselves especially to the study of lichens, and collected these little-known plants in all parts of the country. To their labours we owe the discovery of many rare species, and the high position we now hold in lichenology. Charles Larbalestier was a native of Jersey. When, in due course, he entered St. John's College, Cambridge, his love of natural science was already strongly developed, and while still a student he became an associate of the Ray Club, with such well-known men as Sedgwick, J. Couch Adams, and C. C. Babington. After taking his M.A. degree, he went as tutor to reside in Connemara, where he devoted himself specially to the study of lichens, and found many species not only new to Ireland but new to science. Nylander, the great Continental lichenologist, was then at the height of his activity, publishing in *Flora* from the year 1863 onwards list after list of new European lichens; and in these the name of Larbalestier continually occurs: the Irish records bear dates from 1870 to 1877. During that time Larbalestier visited the Channel Islands and made useful collections there: between the years 1867 and 1872 he issued his *Lichenes Cæsarienses et Sargienses*—two hundred and eighty specimens in about six fascicles. He was in close communication with Leighton, who was then preparing the third edition of his *Lichen-Flora*, and who (in 1879) dedicated the volume to him—"To no one," he writes, "can I more appropriately dedicate this third edition of my *Lichen-Flora* than to you, whose marvellous researches in the West of Ireland and elsewhere, conducted with consummate skill, zeal, and perseverance, have added so largely to our knowledge, and whose unvarying kindness and friendship in communicating authentic specimens of novelties have rendered me service in the preparation of this work." About this time (1879-81) Larbalestier began to issue his Lichen Herbarium of three hundred and sixty specimens in nine fascicles, collected chiefly in the east and south of England and in West Ireland. In 1882 he became a Fellow of the Linnean Society. Leighton dedicated two lichens to him—both unfortunately identical with species already described; a more recent discovery, *Microglæna Larbalestieri* A. L. Sm., will, it is hoped, remain a permanent record in our Lichen Flora. After a period of comparative rest, Larbalestier began again his work of collecting while residing at Cambridge; he issued in 1896 a fascicle containing thirty-five specimens of "*Lichenes exsiccati circa Cantabrigiam collecti*," of which very few copies seem to have been published. In his later years Larbalestier retired to St. Helier, where he died on April 4th, 1911. We are indebted to his friend the Rev. E. L. Bloomfield, Rector of Guestling, near Hastings, for many of the above particulars. Larbalestier's own collection of specimens was bought by Mr. Wm. Cadbury for the University of Birmingham; but during his lifetime he gave freely to his fellow-workers, and many of his specimens included in the lichen herbaria of Joshua, Holl, Pigott, Davies, Crombie, and others have come into the possession of the British Museum.—A. L. S.