

REVIEWS

W. R. TAYLOR. *Marine Algae of the Eastern Tropical and Subtropical Coasts of the Americas* — University of Michigan Studies, Sci. Ser. XXI — Ann Arbor, U.S.A., The University of Michigan Press and Toronto, Canada, Ambassador Books Limited, 1960. IX + 870 pp., 14 textfigures, 80 plates. Price \$ 19.50.

The enumeration of about 760 species and 140 varieties and forms of marine algae growing along the eastern coasts of the tropical and subtropical parts of America, and belonging to the *Chlorophyceae*, *Xanthophyceae*, *Cryptophyceae*, *Chrysophyceae*, *Phaeophyceae*, and *Rhodophyceae*, is preceded by an historical review of collecting and knowledge of those algae. One new family, *Wurdeimanniaceae*, eight new species of the genera *Caulerpa*, *Dictyota*, *Dictyopteris*, *Padina* (by Thivy), *Cryptonemia* and *Ceramium*, and four new varieties belonging to the genera *Dictyota*, *Galaxaura*, *Rhodymenia*, and *Herposiphonia*, have been described. Several formae are only marked as such, but not given a name. A number of new combinations are found all through the systematical part of the book. Though this book contains a great quantity of information about the marine algae from the coasts of Bermuda and North Carolina up to that of southern Brazil, the author does not claim monographic completeness. Doubtful records remain for further investigation.

A short chapter on geographical distribution is included, as well as an extensive one on the habitats of the algae, illustrated by 14 photographs from Bermuda and Jamaica. The last mentioned chapter contains an elaborate description of the algal vegetation in all its variations in the territory dealt with. Moreover, it gives many practical indications for effective ecological studies. At the end an explanation of the "Sargasso Sea" is found.

Collection and preservation of marine algae in the tropics are amply discussed. The author made extensive collections himself on the coasts of Dry Tortugas (Florida), Bermuda, Jamaica, Panama, Netherlands Antilles, and Venezuela. It is very useful that such details as the most suitable equipment, the clothing, and hazards which may be avoided, are included. Even those who are used to collecting will find many valuable advices.

The systematical part contains keys to families, genera, and species. Descriptions are added to all the taxa. The distribution of the species restricted to the islands and the states, together with ecological data, as well as references to the literature are mentioned. *Enteromorpha micrococca* Kütz. is kept in that genus, as well as separate from *E. minima* Naeg. ex Kütz., which is a different view both from Kytlin's, who placed the first named species in a separate genus *Blidingia*, and from Bliding's, who brought *E. micrococca* Kütz. (1856) to the synonymy of *E. minima* Naeg. ex Kütz. (1849). A character considered by Bliding of high value to distinguish the species in a certain group in *Enteromorpha*, viz. the number of pyrenoids in the cells, has not been used in the key to that genus, nor in the descriptions. *Enteromorpha plumosa* Kütz., *E. erecta* (Lyngb.) J. Ag., and *E. clathrata* (Roth) J. Ag. are kept separate, which view differs from that of Bliding, who combined these species under the name of *E. clathrata* (Roth) J. Ag.. *Chaetomorpha lnum* (Müll.) Kütz. is kept separate from *Ch. aerea* (Good. ex Dillwyn) Kütz. Regarding these species T. Christensen (1957) meant to have proved that the second mentioned one is the attached form of the first one.

The bibliography contains 25 pp. of references, the index 43 pp. of names of genera, species, varieties and forms.

Most of the 74 plates show 2 to 18 very fine drawings by six different artists, amongst whom is the author himself. They are a welcome addition to the descriptions of the taxa and show to full advantage on the paper used. The last six plates are good photographs.

In this beautifully edited, richly illustrated book the author not only compiles our knowledge of the marine algae of the eastern tropical and subtropical coasts of America, but he also adds a great deal to it. This very valuable book will certainly stimulate the study of marine algae all along the tropical and subtropical coasts everywhere.

J. TH. KOSTER

C. LINNAEUS, *Genera Plantarum* ed. V. 1754. Facsimile reprint 1960. With an introduction by W. T. Stearn. *Historiae naturalis classica* IV. Ed. J. Cramer & H. K. Swann. Wheldon & Wesley Ltd., Codicote, Herts. pp. (xxiv), xxxii, 500, index, add. Clothbound £7.5/- or US \$21.—.

With the rapid increase of scientific institutes a need has been felt for the facsimile reprinting of certain classics and although earlier facsimile editions of the present volume have been published — the last one being the excellent Japanese edition of 1939 — it has been included in this new series.

The editors have been wise to ask Mr Stearn to write an introduction, "Notes on Linnaeus's *Genera Plantarum*", which is most useful for all those who will consult this work which, through its accepted connection with the *Species Plantarum*, is basic for phytography and botanical nomenclature.

This introduction contains the following sections: (1) "Generic names and concepts to the time of Tournefort and Linnaeus" in which the gradual growth of the generic concept in botany is described; (2) Typification of Linnaean genera; (3) The Linnaean sexual system of classification; (4) Key to the classes of the Linnaean system, reprinted from Prain (1900); (5) Editions of Linnaeus's *Genera Plantarum*, of which six are enumerated; (6) Linnaeus's abbreviated references, a most useful list, as these abbreviations are not entirely consistent and extremely concise; (7) A bibliography of references to Stearn's commentary.

Stearn's notes are a most helpful addition and provide a historical background which will prove valuable in evaluating and typifying Linnaean genera.

On the binder is printed "Hist. Nat. Class. IV", but on the title page it reads *tomus* III; the latter is probably a printing error. The printing and binding are good. It is, however, regrettable that the enormous price is prohibitive for most individual botanists.

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