- SANTARIUS, K. A.: The protective effect of sugars on chloroplast membranes during temperature and water stress and its relationship to frost, desiccation and heat resistance. — *Planta* **113** : 105–114, 1973.
- STOCKER, O.: Das Wasserdefizit von Gefäßpflanzen in verschiedenen Klimazonen. — *Planta* **7** : 382–387, 1929.
- STOCKER, O.: Physiological and morphological changes in plants due to water deficiency. — *Arid Zone Res.* **15** : 63–104, 1960.
- STREBEYKO, P.: Procesy Biofizyczne w Roślinie. [Biophysical Processes in a Plant.] — PWN, Warszawa 1976.

BOOK REVIEWS

REMMERT, H.: ÖKOLOGIE — EIN LEHRBUCH. — Springer Verlag, Berlin—Heidelberg—New York 1978. 269 pp., 158 figs. 12 tables.

A further textbook on general ecology has appeared in German as an outcome of lectures held at the University Erlangen, Nürnberg. Main emphasis is put on causal relationships in the function and structural development of ecosystems. As it is usual in the books on general ecology written by zoologists, most examples are taken from the zoological component of the ecosystems and the primary productivity is not discussed in too many details. The first part of the book is devoted to the outecology based on the interpretation of ecological influence of individual environmental factors determining the niches of individual organisms. This section is closed by a detailed description of three ecological cases: relation between surface chemistry and the selection of a biotope, time cycling and ecological conditions and the description of ecological behaviour of wood grouse and roe-deer. The zoological orientation of the author is most conspicuous in the second part dealing with population ecology. It is closed again by three cases: splitting of one population into two separated new populations, population dynamics of crickets and "melting" of *Larus* species. The third section depicts in broad and well chosen traits the dynamics of ecosystem succession, nutrient cycles, food chains, the problems of stability and productivity. Three ecosystems are discussed in some detail: a high mountain lake in Kenya, Spitsbergen, and the man-made landscape in Central Europe. The book is closed by a deliberation on the present and future environment we are living in.

Clear and authoritative text, well chosen examples, "cases" and illustrations, fine and instructive figures and a wise approach to general ecological problems are the outstanding features of this book, which may be sincerely recommended to all those who wish to get new ideas on ecology and who know German.

JIŘINA SLAVÍKOVÁ (Praž)

MEUSEL, H., JÄGER, E., RAUSCHERT, S., WEINERT, E.: VERGLEICHENDE CHOROLOGIE DER ZENTRALEUROPAISCHEN FLORA, BAND II. Fortsetzung der Dikotylen (*Oxalidaceae* bis *Plantaginaceae*). — VEB Gustav Fischer Verlag Jena 1978. Text volume: 710 pp. 6 figs. Map volume: 170 pp., 656 maps. DM 310.—.

This is the second double volume of an already well known and broadly used standard work (the first part was published 1965). Tabular and map data on the distribution of more than 1700 species form an almost inexhaustible source of knowledge of their chorology. The documentation literature, the number of collaborators from the body of leading European botanists and the critical approach of the authors make the work an indispensable, reliable and unrivalled tool for all involved in the study of phytogeography, macroecology, taxonomy, systematics and evolution.

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