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BOOK REVIEWS

FELLENBERG, G.: *Chromosomale Proteine. Funktion und Bedeutung bei höheren Organismen.* — Verlag Eugen Ulmer, Stuttgart 1974. 24 Abb. 15 Tabellen, 52,— DM.

Since the discovery of the leading role of DNA in genetics, chromosomal proteins represented a more or less unpleasant complication, which made uncertain the generalization of at least some of the discoveries obtained in the procaryotes to the eucaryotes. Even now, when the situation has changed thanks to the development of suitable methods and to the effort of many skillful scientists the role of chromosomal proteins is not always appraised sufficiently. It is now evident, however, that those scientists or university teachers who are engaged in the field of e.g. gene regulation, structure and function of chromosomes and synthesis of nucleic acids in eucaryotes need to be familiar with the problematic of chromosomal proteins.

The book of G. Fellenberg, professor of the Institute of Botany, Technical University of Braunschweig, FRG, summarized the recent knowledge in this field as excellently as possible at present. The author is an experienced and well-known researcher in this field, working especially with the plant material. Even though this book belongs to the edition of Botanical Monographies (Phytologie — Klassische und moderne Botanik in Einzeldarstellungen) the data are arranged and selected according to their general importance irrespective of the material.

Those readers who prefer the functional point of view will especially appreciate the chapters dealing with the function of protamines, histones and acid chromosomal proteins in the gene regulation of eucaryotic cells. The major part of the book is devoted to the specialists interested in the structure, binding to DNA, relation to the morphology of chromosome, evolution, biosynthesis, turnover, enzymatic rearrangement (acetylation, phosphorylation, methylation), the role in cell division, heterogeneity during development of gametes or of embryo and last but not least in the cytochemical and extraction methods for their detection.

J. VELEMÍNSKÝ (Praž)

KUSHNIRENKO, M. D.: *Fiziologiya Vodoobmena i Zasukhoustojchivosti Plodovykh Rastenii.* [Physiology of Water Balance and Drought Resistance of Fruit Trees.] — Shtiintsa, Kishinev 1975, 216 pp. Rbl. 1.41, in Russian.

This readable monography is a very welcome addition to the literature devoted to drought resistance of plants. It contains five chapters: Significance of water in plant life, Influence of soil moisture on growth and productivity of fruit trees, Water balance and growth of fruit trees during vegetation period, Drought resistance of fruit trees, and Methods of diagnosis and improvement of drought resistance of fruit trees. The text is illustrated with many tables and figures. Indexes and summaries in other languages are not included. The book offers the reader a basic knowledge of the influence of water stress on fruit trees growth and metabolism and on the productivity of orchards; a useful list of more than 1 000 references facilitates further extension of knowledge in the relevant direction.

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