PLANT GROWTH SUBSTANCES

Edited by Folke Skoog. Madison Wis.: The University of Wisconsin Press. XIV + 476 pages. 1951. $6.00.

This book contains the papers presented by some 40 contributors to a symposium on plant growth substances held September 5-7, 1949 at Madison, Wis., and is published in celebration of the one hundredth anniversary of the founding of the University of Wisconsin. These papers are presented under eight subdivisions of the book, entitled: Plant Growth Substances (containing seven historical and general papers); Growth Substances in Plant Metabolism (4 papers); Tissue Responses to Growth Substances (5 papers); Practical Applications of Growth Regulators (4 papers); Growth Substances in Vegetative Development (4 papers); Growth Substances in Reproductive Development (7 papers); Growth Substances in Pathological Growth (5 papers); and Vitamins and Amino Acids as Growth Factors (3 papers). Among the contributors are many of the men in this country who have been most intimately associated with research on growth substances. Consequently the book is authoritative and up to date. It is an excellent survey of the present status of the subject in all of its phases and will be welcomed by plant scientists and growers generally. — H. W. Poore.

A SYMPOSIUM ON COPPER METABOLISM


This publication consists of the papers and discussions presented at a meeting at Johns Hopkins University under the sponsorship of the McCollum-Pratt Institute. The wide range of subjects covered includes the following: the formation of copper complexes, copper enzymes, the function of copper in plant nutrition, copper metabolism in the invertebrates, the role of copper in diseases of animals, copper metabolism in human subjects, and copper and other micronutrient elements in soils and herbage.

With one or two exceptions, the papers are summations of each author's previously published work as well as the contemporary work of others. Each author has been unusually successful in this symposium in indicating where techniques and the results of his investigations can be applied to the solution of specific problems concerning copper in plant and animal nutrition.

Of the micronutrient elements known to be essential, copper and iron have both received a great deal of attention from biologists. The selection of copper for discussion at this symposium was particularly welcome because of the wide and current interest in the element in metabolic processes in organisms of importance in soils as well as in plants and animals. An important contribution of this symposium was an examination of the interrelationships involved in these various fields. Much material of this nature is found, for example, in the discussion following each paper, participated in by 35 authorities in this field in addition to those who made formal presentations.

The references to recent literature are adequate for assisting the graduate student in widening his grasp of these particular phases of the copper problem in biology. The symposium should also be welcomed by authorities in the field who wish to keep abreast with the many aspects of copper work. — KENNETH C. BESSON.

THE SMUT FUNGII


This book is unique in that it contains no descriptions of the smut fungi, but consists only of catalogued references with a bibliography of 3,355 citations. Some 330 species, with synonyms, are listed alphabetically with the references grouped under the following headings: Control; culture on artificial media; cytology; heterothallism and sex; host range; hybridization and genetics; life history, parasitism and factors affecting; longevity of spores; physiologic specialization; spore germination and factors affecting; varietal resistance and susceptibility, and inheritance of; and miscellaneous records. A note is given on the contents of each paper under the miscellaneous records. Each reference under the main headings is listed as bibliographic number, author, and date of publication (e.g. 984 Green 1932). This complete guide to the literature on smut fungi will save the worker many laborious hours in the library.

The author hopes that the volume "will give subject-matter specialists in other phases of mycology and plant pathology some encouragement or inspiration to prepare similar reviews of their own fields". — J. H. GRAHAM.

GEOGRAPHY OF RUSSIA


N. T. Mirov was born in Russia, and in his youth crisscrossed the country several times. Later, he explored the Pacific Coast of Siberia from the Korean border to the Bering Sea. At the present time, he is lecturer in geography at the University of California at Berkeley.

Geography of Russia will be of value as a supplemental reference book in most libraries on soils. Covering what at the present time is a little known part of the world, the book includes excellent summaries on the soils and vegetation of each of the main Russian areas, along with summaries on other geographical aspects of these sections. It is crowded with detail, well-written, and interesting.

MENTION


1950 Proceedings of the American Society of Sugar Beet Technologists. Secretary-Treasurer, American Society of Sugar Beet Technologists, P. O. Box 531, Fort Collins, Colo. 728 pages. 1951. $8.00.
