

NEW BOOKS

The Yeasts, A Taxonomic Study

J. LODDER AND N. J. W. KREGER-VAN RIJ. xi + 713 pages. North-Holland Publishing Co., Amsterdam; Interscience Publishers, Inc., 250 Fifth Ave., New York 1, N. Y., 1952. \$19.00. Reviewed by L. A. UNDERKOFER, Iowa State College, Ames.

THIS MONOGRAPH makes available in one volume an authoritative system of classification and manual for identification of the yeasts. The first chapter is a brief introduction. In Chapter II the various characteristics which may be employed in yeast taxonomy are discussed with special emphasis on those accepted by the authors for their system of classification. In this chapter are also detailed the methods and media employed for the classification and identification of the yeasts. Chapter III gives a brief survey of the different types of variation which may occur in yeasts and the significance of these variations for yeast taxonomy.

Chapter IV presents the main lines of classification up to the genera with the considerations which led to this classification. Discussions of the species accepted for the three families follow in Chapters V, VI, and VII, respectively. At the beginning of each of these chapters a key to the genera is first presented. Then there is given for each genus a diagnosis, the type species, a historical survey of the generic name, and a key to the species of the genus. Following this are discussions of the various species of the genus. First synonyms and the original description and history of the species are given. The diagnosis of each species is then presented in the form of a standard description. The description is aided materially in most cases by clear and definitive drawings. The diagnosis is followed by discussion and details on the origin of the cultures studied. At the end of the discussion of each genus references to pertinent literature are listed.

While the book aims at being more than a mere manual for the identification of yeasts, the authors have given adequate attention to this function in tying together the keys and descriptions by page references.

Since classification depends on the accepted characteristics upon which groupings are based, some workers in the field may not agree in all cases with the classification of certain of the yeasts as given by Lodder and Kreger-Van Rij. Also their classification sometimes changes the group, and therefore the name, for some familiar organisms which are of

economic importance. Perhaps the most notable example is the well-known food and fodder yeast which is generally known as *Torulopsis utilis*, but which is classified by Lodder and Kreger-Van Rij as *Candida utilis*. In such cases, and in other cases where different names for the same yeast occur in the literature, the present book should be helpful because of the excellent index to taxa (organisms and groups). This index includes the accepted names as well as the synonyms.

This book should be very useful to microbiologists in general, and particularly to those of the fermentation and food industries in which yeasts are employed as culture organisms or may be found as contaminants.

Insect Control by Chemicals

A. W. A. BROWN. viii + 817 pp. University of California Citrus Experiment Station, Riverside, Calif. John Wiley & Sons, Inc., New York, 1951. \$12.50. Reviewed by F. A. GUNTHER, University of California Citrus Experiment Station, Riverside, Calif.

THIS IS AN ambitious book and a credit to its author. It represents a very comprehensive treatment of the factors involved in the chemical control of insects and is the most comprehensive of the several books recently published in this field. Such intensive coverage represents a tremendous undertaking for one author, and its broad scope has undoubtedly contributed to the number of misstatements and errors that were observed.

In 11 chapters Prof. Brown discusses insecticides of the mid-20th century and their properties, the structure of organic chemicals and their toxicity to insects, susceptibility of insects to the entry of poisons, the pharmacology of poisons for insects, equipment developed for the application of insecticides, the application of insecticides from aircraft, toxicity and hazards to man and domestic animals, toxicity of insecticides to plant growth, chemical control of insects feeding on plants, chemical control of insects affecting man and animals, and insecticides and the balance of animal populations. These chapters, of which chapters III, IV, and VII are perhaps most noteworthy because of their modernness and thoroughness, include references to over 2200 original papers. There is an adequate 36-page index. The quality of the printing and illustrations is excellent.

Despite the 1951 dateline for this

book, it should prove invaluable to chemists seeking biological information and particularly for those desiring to establish a comprehensive background in the field of insecticides. It will be especially valuable to the reader with sufficient chemical training to evaluate the numerous errors and omissions in many of the discussions of the chemistry of the compounds involved. Nonetheless, this book should be read carefully by every chemist interested in insecticidal materials.

Agricultural Research Publications Available

35 pages. Texas Agricultural Experiment Station, College Station, Tex. No charge.

A BIBLIOGRAPHY of bulletins, circulars and technical papers published by Texas Agricultural Experiment station. The publications cover the fields of: Agricultural economics, animal production and diseases, fertilizers, crops, plant diseases, plant insects and other topics of interest in the area of agricultural production.

Fruit and Vegetable Storage And Pre-Packaging

Anglo-American Council on Productivity. 64 pages. British Productivity Council, 21 Tothill St., London SW1. 1953.

REPORT OF the British team which visited the US in 1951 to study prepackaging and storage of fruits and vegetables. A review of current fruit and vegetable processing techniques in the US and the applicability of these techniques to the problems in the UK.

Review of Current Research and Directory of Member Institutions

330 pages. Engineering College Research Council, State College, Pa. \$2.50.

A BIENNIAL publication which reviews all branches of engineering research and most related fields currently under investigation in 103 member institutions of the engineering College Research Council. Approximately 7500 individual research projects are reported. In addition to the review of projects, there are discussions of the research facilities and personnel at each of the member colleges.