

# New Books

## Advances in Pest Control Research, Vol. I

R. L. METCALF, Editor, VII + 513 pp. Interscience Publishers, Inc., New York and London, 1957. \$11. Reviewed by L. LYKKEN, Shell Chemical Corp., New York, N. Y.

THIS VOLUME consists of 10 chapters prepared by different authors and edited by Dr. Metcalf. Each author is a recognized specialist in his field. The subject matter for each chapter has been "selected from recent significant research trends related to all phases of pest control, with emphasis on the fundamental aspects." Specifically, the topics covered include: control of health hazards, use of radioisotopes, status of systemic insecticides, determination of pesticide residues, mode of action of herbicides, chemistry of organophosphorus insecticides, mechanisms of fungitoxicity, soil fungi, and repellents for biting anthropods.

The material in each chapter is presented in a logical and highly readable manner, preceded by a short table of contents. In the reviewer's opinion, this volume fulfills the expressed purpose of presenting comprehensive reviews and critical evaluations of new concepts and developments in the field of pest control. It should be successful in stimulating new lines of research, as well as remaining a reference work for the research worker, the teacher, and the student. Each author has brought up to date the current information in his particular field. In a couple of chapters, there is little new material, with the result that only a comprehensive review of the subject is given. The chapter on repellents for biting anthropods is a case in point. The book contains numerous structural formulas but no photographs or illustrations. Those working intensively in specific areas will certainly welcome the extensive lists of selected references accompanying each chapter.

A chapter of approximately 50 pages, by A. S. Crafts, is devoted to the chemistry and mode of action of herbicides; a chapter of similar size, by T. R. Fukuto, covers the chemistry and mode of action of organic phosphorous insecticides. Both of these chapters give thorough coverage and offer much useful information. Also, there is an excellent chapter, by Paul A. Dahm, in which the uses of radioisotopes in pesticide research are correlated with the present knowledge

in the field. James G. Horsfall describes, and very well, research done in the basic sciences that are the foundation of plant protection. He approaches the subject by discussing the essential functions of the fungus that are affected by fungicides.

Current significant developments in control of soil fungi and interpretation of successes and failures in relation to concepts or principles involved are considered by J. B. Kendrick and G. A. Zentmyer. The status of systemic insecticides in pest control practices is covered by W. E. Ripper, but the chapter deals only with the phytophagous pests.

The last two chapters pertain to the determination of pesticide residues. M. S. Schechter and I. Hornstein review in very complete manner the recent developments in physical and chemical (including enzymatic) methods, placing emphasis on the organic pesticides because of their current prominent role and the numerous difficulties often experienced in the determinations of their residues. Yun-Pei Sun reviews the principles, validity, and methods for the bioassay of pesticide residues. J. M. Barnes presents an excellent review of current information pertaining to the health hazards associated with the use of pesticides, especially organophosphorous compounds. He indicates that the situation has not changed much since 1952.

The information contained in this book should be very valuable to anyone working with pesticidal materials. The editor and the publisher should be congratulated on their very timely contribution to this complex, yet practical, field of research. If Volume I is indicative of the quality of future volumes, then everyone interested in pest control research should be eagerly awaiting subsequent volumes.

## Fungicide Results

The American Phytopathological Society for several years has sponsored the publication of results from tests on newer fungicides. This year, for the first time, the material has been printed privately and is issued as a single unit. The "Results of 1957 Fungicide Tests" can be secured at \$1.00 per copy only from Dr. A. B. Groves, Department of Plant Pathology and Physiology, Winchester Fruit Research Laboratory, Rural Route 3, Winchester, Va. All orders should be accompanied by remittances made out

to the American Phytopathological Society. An added charge will be made for postage and handling where orders must be billed.

## Compilation of Pesticide Laws

The seventh revision of the Compilation of Economic Poisons Laws has been published by the Chemical Specialties Manufacturers Association. The revision brings the compilation complete to Jan. 1, 1958. A new index, tabulation of laws, and lists of officials are included.

CSMA members having the membership copies of the compilation will receive their copy of the revision without charge. Additional copies of the revision will be \$5.00 to members and \$10 to nonmembers.

It is available from Chemical Specialties Manufacturers Association, 50 East 41st St., New York 17, N. Y.

## LITERATURE AVAILABLE

**Caking Prevention.** Twenty-page bulletin describes Belgian polyethylene glycol called Tensiorex P for the prevention of caking of ammonium sulfate. Write Dept. A&F, BELGIAN INDUSTRIAL INFORMATION SERVICE, 630 Fifth Ave., New York 20, N. Y.

**Experimental Insecticide.** Folder presents company interpretation of its tests and the tests of over 100 state and federal entomologists on Sevin experimental insecticide. Details cover its effectiveness on fruit, cotton, and vegetable insects. Write Dept. A&F, Advertising Distribution Section, UNION CARBIDE CHEMICALS Co., 30-20 Thompson Ave., Long Island City 1, N. Y.

**Insecticide.** Details on Trithion, Stauffer organic phosphate insecticide, contained in brochure. Brochure indicates which insects chemical will kill, as well as tolerances so far established, residual activity, and toxicology. Four formulations are described. Dept. A&F, STAUFFER CHEMICAL Co., 380 Madison Ave., New York 17, N. Y.

**Soil Fungicides.** Advice on use and benefits of soil fungicides offered in three pamphlets. Two describe the use of Terraclor on vegetables and crucifers. The third is a technical application bulletin for the treatment of damping-off or "soreshin" on cotton. Dept. A&F, Insecticide Products Division, OLIN MATHIESON CHEMICAL CORP., 10 Light St., Baltimore 3, Md.