

## Book Reviews

**Organic Insecticides.** Their chemistry and mode of action. Robert L. Metcalf. Interscience, New York-London, 1955. x + 392 pp. Illus. \$8.50.

The author, who is an entomologist at the University of California Citrus Experiment Station, Riverside, explains in the preface that the present work is an outgrowth of his monograph, *The Mode of Action of Organic Insecticides*, published in 1948 by the National Research Council. Although he is listed as an entomologist, R. L. Metcalf has made many important contributions in the fields of insecticide chemistry and toxicology.

The book is divided into 14 chapters, titled as follows: "Nicotine, nornicotine, and anabasine"; "Rotenoids"; "Pyrethroids"; "Joint action of insecticides"; "Organic thiocyanates"; "Dinitrophenols"; "Dichlorodiphenyltrichloroethane (DDT)"; "Acaricides"; "Benzene hexachloride"; "Cyclodiene insecticides"; "Organic phosphorus insecticides"; "Carbamates"; "Miscellaneous insecticides"; and "Insecticide resistance."

Each of the chapters on insecticides discusses the chemistry, mode of action on insects, relation of chemical structure to physiological activity, and the mammalian toxicity of a group of related organic materials. The chapter on "Joint action of insecticides" is restricted to pyrethrins and allethrin and materials that increase their activity. Synergists with DDT are covered in the chapter on resistance. The chapter on acaricides is limited to those materials effective against mites. "Ticks" are mentioned only casually in a few places in the text, and none of the common species are listed in the rather complete index.

Each chapter is documented with carefully selected references, a total of more than 1200 citations to the literature being given. Many references are to 1954 articles, and the patent literature is also adequately represented. The book is well organized and the selected subjects are thoroughly covered.

The most glaring omission seems to be the absence of information on the organic chemicals used as insecticidal fumigants (methyl bromide, ethylene dibromide, chloropicrin, and so forth) and insect repellents and attractants. A non-

entomologist would have probably preferred the use of common names of insects instead of the scientific names that are given. Otherwise the book is written in a clear, concise, and easily readable style. As a result of his diversified experience, Metcalf was able to select for compilation into tables data that present in a small space much information from many sources.

In general, this is an excellent book that will be welcomed by all persons interested in insect physiology, toxicology, and insecticidal chemistry.

F. H. BABERS  
*U.S. Department of Agriculture*

**Midwest and Its Children.** The psychological ecology of an American town. Roger G. Barker and Herbert F. Wright. Row, Peterson, Evanston, Ill., 1954. vii + 532 pp. \$7.50.

*Midwest and Its Children* is a report of a 7-year research project about the naturally occurring behavior of all the children in the American community labeled Midwest. Roger Barker and Herbert Wright raised a simple question: What kinds of behavior transactions take place between children and the places and people in their lives? Their answer is a monumental achievement consisting of a wealth of data, painstakingly gathered by rigorous and creative methods and organized and clarified by significant and meaningful concepts. Interspersed with the major report is a comparative study of disabled children from neighboring towns and from a school for crippled children. The latter added feature serves two purposes: to add to our understanding of the psychological problems of the physically disabled, and to test the value of the methods and concepts of psychological ecology that the authors have evolved.

A primary problem confronting the researcher in psychological ecology is the discovery and analysis of the relevant loci of behavior: the structure and dynamics of the community in which behavior occurs. The pertinent unit selected by Barker and Wright is the "be-

havior setting." Here again, a simple question led to complex, yet clarifying, answers. The section of the book devoted to this problem not only identifies the behavior settings of Midwest, along with explicit criteria for what constitutes a setting, but provides data about eight characteristics of settings. Thus, the reader not only is enlightened about their number, content, kinds, and varieties (community "size") but is also informed about the populations that enter the settings, the relative prominence of the settings in the lives of children, the kinds of action patterns and behavior mechanisms prevalent, the role that children play, and the degree to which they penetrate these settings. Not only are the living conditions of children thus mapped, categorized, and analyzed, but they are also plotted for the kind of *social weather* (approval, affection, acceptance, communication, and so forth) experienced therein. Further than this, the authors point up some of the implications of the behavior settings survey for the behavior, mental health, and development of Midwest's children.

A second section of the book has to do with the psychological habitats and behavior of children. The unit for this problem is the "behavior episode." To my mind, this is the most sophisticated and clearest discussion in the psychological literature of what constitutes the most appropriate and fruitful behavior unit for psychology. Conceptual definitions of behavior units, methods for observing, recording, and episodizing behavior are clearly stated, together with ample concrete illustrations. Beyond the authors' contribution to the determination of behavior content and the definition of behavior units is their analysis of the "behavior stream" and their ability to delineate and define structural properties of this stream. Data are presented dealing with developmental changes in structural characteristics of behavior, the initiation and termination (spontaneous or pressured, and so forth) and the outcome (success or failure, and so forth) of episodes, and the comparison between Midwest children and the physically disabled children.

The third section of the book deals with social action and interaction. As with the other sections, concepts and categories are explicitly defined and adequately illustrated. Data are presented dealing with the frequency and complexity of interaction of the children with other categories of persons (other children, adults, fathers, mothers, and so forth), with the modes of interaction (dominance, nurturance, and so forth), with interplay variables (conflict, disjunction, and so forth), and so on. Comparative findings are also presented for the physically disabled as well as for