
College Entomology

In this new text "the author has sought to furnish the essential facts about insects with which every well-informed person should be familiar" (p. v). It is written from a world point of view, and the species treated are those of particular interest because of their historical background, economic importance, or unusual and interesting appearance or habits. The text is divided into 36 chapters; the first three deal with metamorphosis (pp. 1-12), anatomy (pp. 13-52), and classification (pp. 53-58); each of the other chapters deals with one of the 33 insect orders.

The treatment in this text is largely systematic. In the arrangement of the various systematic categories the author has taken an advanced point of view; though every change involving the name of an order, family, or genus is evidently the result of much research, the author's arrangement may at first seem somewhat disconcerting to those students who are more familiar with the older and less elaborate systematics.

The chapter on metamorphosis is complete, concise, and well illustrated. That on anatomy is concerned largely with internal anatomy (15 pp. on external anatomy, 24 on internal anatomy); the discussion of external anatomy seems somewhat sketchy (e. g., two pages on mouthparts with two figures, and two pages on venation with no figures), but anatomical characters are more fully discussed in the chapters on individual orders. The chapter on classification contains a list of the orders and a key to the orders of adult insects.

Each chapter on an individual order contains a discussion of the historical features concerned with the use of names (usually in footnotes), the derivation of all names of family rank or above, common names of the insects in the order (often in French and German as well as English), a synopsis of the characteristics of the order (usually in tabular form), a discussion of the biology of the order, keys to the families, and a brief discussion of most of the families. At the end of each chapter is a list of selected references.

Any college course in entomology based on this text would be largely systematic; the book contains no organized discussion of the economic importance of insects or insect control, or of insect ecology, phases of entomology which would seem appropriate for inclusion in an entomology course.

From the standpoint of the material covered, this is an excellent book and should receive widespread use. It is well illustrated, and contains many worth-while features not ordinarily found in books of this sort. We particularly like the author's plan of outlining in tabular form the characteristics of the immature and adult stages of each order. The keys are workable and the characters are well illustrated. Though we noticed a few typographical errors, the book in general seems to have been carefully edited. It is well bound and printed on a good grade of paper.—*D. J. Borror.*

College Entomology, by E. O. Essig. vii+308 pp. New York, The Macmillan Company, 1942. \$5.00.