

PELTIER, GEORGE L., GEORGI, CARL E., and LINDGREN, LAWRENCE F. *Laboratory Manual for General Bacteriology*. Third ed. John Wiley and Sons, Inc., New York. viii + 295 pp. illus. 1946. \$2.50.

A manual designed to guide the student in his first course in college bacteriology. Though it is not divided into definite sections, three phases of the subject, techniques, metabolic activities of bacteria and practical applications of microbiology each occupy about equal space in the manual. Classification receives only minor treatment. A few well-chosen questions and page references to five standard texts occur at the end of each exercise. The directions for each exercise are concise but complete.

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JAQUES, H. E. *Plant Families—How to Know Them*. William C. Brown Co., Dubuque, Iowa. 173 pp. 1941. Spiral binding, \$1.50; cloth binding, \$2.50.

In this illustrated volume of the Pictured-Key Nature Book Series, the author has organized the keys to over five hundred families in the plant kingdom. There is a phylogenetic list in the back of the book including the sub-division, phylum, class and order to which each of these families belong. The illustrations are accurately made drawings of representative species of four hundred seventy-two of the listed families. The keys are short, with minimum usage of technical terms and yet are scientifically reliable. The book has sixteen pages of index and pictured glossary.

This book serves as a very handy laboratory or field guide in giving briefly the essential characters by which the families may be recognized. It is especially recommended for beginning botany students because of its being self-explanatory and easily understood. With a few lessons in the systematic use of these keys it is surprising how many plants the unfamiliar student can place into the correct family.

JAQUES, H. E. *Living Things—How to Know Them*. William C. Brown Co., Dubuque, Iowa. 172 pp. 1946. Spiral binding, \$1.50; cloth binding, \$2.50.

This illustrated key to the phyla, classes and more important orders of plants and animals with suggestions for studying. There are four hundred fifty-seven accurately drawn figures which make the interpretation of the keys quite relatively easy for the inexperienced biology student. There is a phylogenetic list in the back of the book including categories as the division, phylum, class and order to which each of the described form of life belongs. The approximate number of described species in each phylum is also listed. More than one hundred suggestions for nature study projects are given. These are varied enough to attract both the young and the old students of biology. A list of over fifty of the best reference books in biology is included.

This book is truly a handy reference key for introductory work in systematic biology. It will answer the favorite question so many times—What is it?

CONARD, HENRY S. *How to Know the Mosses*. Wm. C. Brown, Dubuque, Iowa. 166 pp. 1944. Spiral binding, \$1.50; cloth binding, \$2.50.

Mr. Conard, who is a professor of botany at Grinnell College and president of the Sullivant Moss Society, has done an excellent piece of work in this volume of the Pictured-Key Nature Series. He has given a systematic key for their identification and illustrated over two hundred ninety species of mosses and liverworts. A systematic list of all of the described and illustrated species also appears in back of the book. There are ten pages of illustrated index and glossary. He has also given fourteen pages of extremely interesting reading on the uses, habitats, and general characteristics for classification of the mosses and liverworts. Illustrations are used freely.

This handy little volume is very well adapted for use in the field by the student or the experienced bryologist.