

interesting and stimulating it would be, had it been preceded by a full well-illustrated account of the biology of these organisms. The 573 figures, so careful for form but tiny and uncoloured, cannot tell their exquisite story and are of little use to recruit future workers; they will be the better understood if used in connexion with Arthur Lister's coloured plates in his monograph of 1911.

Taxonomy is not an end in itself. Indeed, it is merely a convenient method of cataloguing, and something apart from modern conceptions of science. To the reviewer it is by itself analogous to stamp collecting and cataloguing—quite a good amusement but leading nowhere. It becomes interesting when the stamps are studied in relation to the histories of countries, as these Myxomycetes might well be if described in relation to their environment.

Insect Physiology. By Dr. V. B. Wigglesworth. (Methuen's Monographs on Biological Subjects.) Pp. x+134. (London: Methuen and Co., Ltd., 1934.) 3s. 6d. net.

ENTOMOLOGISTS have seldom concerned themselves with problems of insect physiology. The study of structure, habits and taxonomy in so vast a class has monopolised the field. What is known of insect physiology has, for the most part, resulted as a sideline or by-product of other investigations, rather than as the outcome of the study of insects as such. In the last ten years or so, entomologists have come to realise the necessity for exact knowledge of the functions of insect organs and tissues, especially in regard to the problems of insect control. It is in the latter connexion, perhaps more than any other, that our ignorance of physiology has revealed itself most.

In writing this handbook, Dr. Wigglesworth imparts to his subject a freshness of outlook which only comes to a writer who has acquired first-hand knowledge. His own researches into the physiological make-up of insects have broken new ground, and are always suggestive and productive of ideas. The results of these studies find their place in the book but, at the same time, the author has explored the literature on insect physiology with admirable thoroughness (as the bibliography will testify) and subjected it to critical selection. In a sense, the book is quite unique since it has no competitors: the only previous survey of the subject at all comparable is that of Marchal, published in 1911. It needs no further recommendation, and every entomologist and zoologist should possess it.

A. D. I.

The Familiar Trees of Hopei. By Hang-Fan Chow. (Fan Memorial Institute of Biology, Peiping, Handbook No. 4.) Pp. xiv+370. (Peiping: The French Bookstore, 1934.) Cloth, 3 dollars; paper, 2.40 dollars.

THE publication of an English edition of this book simultaneously with the Chinese text will be welcome to many foreign botanists and others interested in the trees of the district around Peiping. The author claims to include only the more common species occurring in the Province of Hopei, and this object

has been fully attained. The Englerian system of classification is adopted. Useful keys to the families, genera and species respectively are supplied. From these, in conjunction with the descriptions, the student should in most cases have little difficulty in naming the trees met with in this part of China. Taxonomic works published in China in recent years have been noted for the high standard of illustrations from line drawings, and in the present work Mr. C. R. Feng has maintained this high standard in illustrating practically all the species which Mr. Chow describes here. The distribution of each species is given and under the heading "Use" are, in many cases, a number of interesting notes. The book is clearly printed, but there is no index.

C. V. B. M.

Chemistry

Theoretische Grundlagen der organischen Chemie. Von Prof. Walther Hüchel. Band 1. Zweite Auflage. Pp. xii+475. (Leipzig: Akademische Verlagsgesellschaft m.b.H., 1934.) 19.80 gold marks.

A LITTLE more than three years ago the first edition of Prof. W. Hüchel's "Theoretical Outlines of Organic Chemistry" was published (*NATURE*, 129, 41; 1932) and now we have the second edition of the first volume of that work.

The present edition keeps generally to the original plan, but there have been minor and justifiable rearrangements. Prof. Hüchel's critical survey of some modern work is stimulating, but stated so didactically may, and does, meet with many criticisms. The really disappointing feature of the present work is the omission of references to advances in organic chemistry which have been made during the last three years; these advances have been described, if only—and necessarily—briefly in the excellent "Annual Reports of the Progress of Chemistry" published by the Chemical Society, with a reasonably full bibliography. Incidentally, it is worth while recording that the cost of this new edition of Prof. Hüchel's book is rather more than six times the cost of any one volume of the "Annual Reports".

The appearance of finality which the written word is apt to convey is not in keeping with the publication of new editions of such works at very short intervals. Provided that the first or original edition is well planned, and this is certainly true in the case of Prof. Hüchel's book, it is suggested that such rapid republication is unnecessary and it is certainly to be deprecated.

C. S. G.

Conductometric Analysis: Principles, Technique, Applications. By Dr. Hubert T. S. Britton. (Monographs on Applied Chemistry, Vol. 8.) Pp. xi+178. (London: Chapman and Hall, Ltd., 1934.) 12s. 6d. net.

THIS book is a smaller and more specialised companion to the author's volume on "Hydrogen Ions", published in the same series. After two short introductory chapters on the nature and significance of