

(J. N. Smith); some recent advances in apicultural research (G. F. Townsend and R. W. Shuel).

The editors in their preface speak of "critical and penetrating reviews in contrast to routine summary accounts", and in the present volume reviews of this type predominate. Indeed, for the general entomologist, this is perhaps the most useful collection that has appeared in this series. Most of the articles are on general topics, and the few that deal with restricted groups are full of ideas that might be applied to other insects of similar habit.

In this volume the clarity of the writing is much better than in some earlier *Reviews*. For example, the account of control systems of orientation in insects, which could easily have become baffling, is presented most lucidly; while the statement in the discussion of mathematics in population ecology that "Because Volterra's model is based on an inadequate set of assumptions it is of no use in showing how best to control insect pests, and in fact is downright misleading in this regard" could scarcely be more direct.

H. OLDROYD

Acrolein

Edited by Dr. Curtis W. Smith. Pp. ix + 273. (New York and London: John Wiley and Sons, Inc., 1962.) 94s.

THIS little book is a complete treatise on the chemical aspects of acrolein. The fifteen authors have spared no efforts in making sure that the information is complete, accurate and up to date. The whole is based on a review of published works and patents up to January 1960, and is supplemented by unpublished data made available by several major laboratories.

The book is divided into small, well-written chapters, liberally sprinkled with tables, figures and formulae with what must be a fairly complete list of references, some 870 in all. With so many contributors, the editor has done well in maintaining continuity of thought and purpose, possibly due to the fact that he and his authors are all members of the same commercial organization.

The history and methods of preparation are briefly dealt with, followed by an extensive treatment of the physical and chemical properties, concluding with a chapter on analytical methods. There is a very useful section on the handling of the substance and its toxicology.

The book is a little too expensive for its size and this will tend to discourage all but those actively engaged in the field from buying it. This, however, does not detract from the fact that this is a mine of information for anyone even vaguely interested in the subject.

W. FORBES

Progress in Experimental Tumor Research

Vol. 2. Edited by F. Homburger. (Fortschritte der Experimentellen Tumorforschung, Band 2.) Pp. xiii + 386. (Basel and New York: S. Karger, 1961.) 72 Swiss francs.

THE subjects covered by this book were selected after scrutiny of the replies to a questionnaire sent to members of certain learned societies in countries all over the world. At first sight, this seems to be a splendid way of planning a book of this kind; however, it has inherent drawbacks. Already the 'band wagon effect' looms dangerously in the determination of programmes of work. For publishers to aid and abet this process by providing the scientific public

with the kind of scientific news they want can only make the situation worse.

The ten chapters cover a variety of subjects with varying degrees of success. Those on the carcinogenicity of tannins (Korpassy) and beryllium (Scheppers) are useful but diffuse, and that entitled "Critique of Carcinogenic Mechanism" (Nakahara) cuts more corners than it explores. A progress report on cancer chemotherapy (Sugiura) is too incomplete to be of much use to those working in the field. There is a competent and admirably brief survey of human hormone-dependent tumours (Boyland), and a rather longer chapter (Kirby) in which the hypothesis that a "DNA-DN-polymerase functional unit" provides the basis for the progressive series of changes leading to malignancy is put forward. Amano's virus classification based on host-virus relationships acts as a pleasant stimulant after Luse's rather dull conclusion that "electron microscopy has failed to reveal any characteristic peculiar to neoplastic cells and absent from all normal cells". The chapters by Ham and Siminovitch on carcinogenesis by the polyoma and other viruses, and by Bern and Nandi on the influence of hormones on the induction of mammary tumours in mice, are excellent.

All in all this is an interesting volume and one full of useful references.

F. J. C. ROE

Die Cactaceae

Handbuch der Kakteenkunde. Von Curt Backeberg. Vol. 6: Nachträge und Index. Pp. 3545-4041. (Jena: Gustav Fischer Verlag, 1962.) 82.70 D.M.

"EVEN the weariest river winds somewhere safe to sea", and this is true, if only for the moment, even of the indefatigable Herr Backeberg. The sixth, and last, volume of his *Handbuch* to the Cactaceae consists mainly of several hundreds of pages of addenda, corrigenda and supplementary matter. They are preceded by a paper, by G. D. Rowley, on the genealogy of the large-flowered cactus hybrids. Finally, in a postscript, the author discusses several problems such as that of the typification of species, a difficult question because of the nature of succulents, and he urges the advantages of "photographic type material". The index of names, which excludes those of hybrids, carries us from page 3,919 to page 4,041, the end of this truly colossal work.

N. Y. SANDWITH

Museum Publications

A Classified List and Index of Books, Pamphlets and other Monographs, and of Serial Reprints. Part 2: Publications in Biological and Earth Sciences. By Jane Clapp. Pp. 610. (New York: The Scarecrow Press, Inc., 1962.) n.p.

THIS is a massive production which certainly indicates the wealth of the publications issued by the museums of the United States and Canada. No other country in the world could even approach such an output. The book comprises a classified bibliography of the publications available from 276 museums. The present volume is Part 2 of the complete work and refers to 9,231 publications on the biological and earth sciences. Included are books, pamphlets, monographs and serial reprints, but excluded are the publications of the United States National Museum and the National Museum of Canada, administrative reports and similar works.

The book includes a complete list of the museums now distributing publications, and this is followed