Cytology and Cell Physiology

Edited by Geoffrey H. Bourne. Second edition. Pp. xvi+524. (Oxford: Clarendon Press; London: Oxford University Press, 1951.) 50*s*. net.

THE second edition of this important book is to be welcomed, even though nothing like a coherent view of protoplasmic activity can yet be obtained from it. It is also perhaps to be kept in mind that its effective date is not 1951 but more nearly July 1948, as indicated by the preface. Even so, a great deal has happened since before the Second World War (the effective date of the first edition was 1941). Somewhat ironically perhaps, the most buoyant expressions of optimism regarding imminent progress to be expected in the next decade have been reprinted without change in the least emended chapters. On the other hand, where opportunity has been found for incorporating a large body of new matter, the usefulness to the reader of the subjects discussed has been very greatly enhanced. This concerns especially Schulman's chapter on monolayers, White's on cytogenetics, Bourne's on mitochondria and Golgi bodies, Ludford's on pathology, and Blaschko and Sanders's revision of the chapter on intracellular enzymes.

Two new chapters on histogenesis in tissue culture and in evolution respectively, by Fell and by Willmer, introduce aspects of normal (as opposed to pathological) histology in animals. At the other end, two additional introductory sections by Sanders and Barer, respectively, deal with some of the very powerful new technical developments such as phase-contrast microscopy, electron microscopy and the reflecting microscope. A certain amount of repetition has resulted from such a considerable insertion of new matter, and there are also a few distressing misprints, such as the quotation of 1300 A. as a wave-length of the infra-red (p. 71). Some of the new references mentioned in the text are omitted from the bibliographies.

These are, however, minor defects. On balance, the changes have been very beneficial, and though no single reader is likely to be equally concerned with the whole contents of the book, the great variety of recent bibliographies collected together under one cover is probably one of its most valuable features.

The Littoral Fauna of Great Britain

A Handbook for Collectors. By Dr. N. B. Eales. Second edition. Pp. xvii+305+26 plates. (Cambridge: At the University Press, 1950.) 20*s*. net.

THE second edition of Dr. N. B. Eales's well-known student's book of sea-shore animals has four additional pages devoted to examples of practical exercises in quantitative distribution on sandy and on rocky beaches. These pages are inserted in the appendix, leaving the main pagination unchanged. Some useful descriptions of eggs and egg capsules have been added here and there, and there are other small additions. Thus, *Elminius modestus* appears in the section on cirripedes, and the magnesium chloride method of narcotization has been added to that on preservation. The price of the book has been substantially increased.

In compiling this book the author was faced with a task from which most would have shrunk. One cannot but admire the way in which she has collected and set out an immense amount of most useful information on the classification, external anatomy—and, to a small extent, ecology—of most common and many uncommon shore animals and provided keys to help with their identification. There is no doubt, too, that this unique compilation is well liked—and justly so—by students attending courses in marine biology, although it probably covers more adequately the fauna at Port Erin than elsewhere, in spite of the inclusion of many species not recorded for that locality. The problem of selection must have been one of great difficulty, and it is only to be expected that it is not as successful for some localities as for others. Some groups receive relatively full treatment (for example, decapods, molluscs, echinoderms and fishes), mention being made of almost all species likely to be found on British shores, and quite a few from the region immediately beyond. Other groups, however, are not so completely covered. The treatment of the polychætes, for example, is inadequate for the south-west of England and, at Plymouth, often leads astray students who ignore the author's own instruction to consult the appropriate monograph for final identification. The inclusion in a future edition of another twelve or eighteen common Plymouth shore polychætes would do much to put this right. The section on amphipods could also be enlarged with advantage.

D. P. WILSON

Flora of the Land of Israel

Iconography. By Naomi Feinbrun and Michael Zohary. Pp. 12+50 plates. (Jerusalem: *Palestine Journal of Botany*, Hebrew University, 1949.) n.p.

THIS is a series of line drawings from living specimens portraying quite effectively a selection of Palestinean plants, mostly on a life-size scale. In addition to the habit, botanical details for some of the species are also illustrated. The collection is a miscellaneous one, and indeed no less than twenty-seven families are represented on these fifty plates. There is no obvious basis of selection; but, since the authors refer to this as a first step towards an iconography of the local flora, one may anticipate that it is but an instalment of what is intended ultimately to be a complete series.

Several of the figures represent endemics of Palestine, including three species of *Iris*, namely, *I. atropurpurea*, *I. mariæ* and *I. nazarena*, the liliaceous *Bellevalia desertorum*, and *Orchis galilæus*. The brief accompanying notes furnish some morphological and other data, as well as indications of the distribution; but diagnostic botanical characters would have been a welcome addition, and the value of such would have been enhanced as the work proceeds and more species are added in the different groups.

The drawings mostly convey an excellent idea of the character of the species, and some, as, for example, those of the wild *Cyclamen persicum* and *Bellevalia flexuosa*, are exceptionally lifelike; only a few, such as those of *Ceterach officinarum* and *Oxalis cernua*, conspicuously fail to do justice to their subjects.

E. J. S.

Colours

And How we See Them. By Dr. H. Hartridge. Pp. xi+158+12 plates. (London: G. Bell and Sons, Ltd., 1949.) 15*s*. net.

THE six chapters of this book are mainly the content of the six Christmas lectures for children given by Prof. H. Hartridge at the Royal Institution in 1946. The treatment is therefore necessarily