

*Secondary Metabolism in Plants and Animals*

by M. Luckner

Chapman and Hall; London, 1977

xviii + 404 pages. £ 5.00 (paper)

It is a pleasure to welcome Professor Luckner's book in a paperbacked edition. Appearing first in German in 1969 and then as a hardbound English translation in 1972 'Secondary Metabolism in Plants and Animals' provided, and still provides, an overall survey of secondary metabolism which cannot be found elsewhere. The author assumes in the reader a basic knowledge of chemistry and biochemistry, but does not hesitate to take him back and show him how the metabolic pathways leading to 'secondary' metabolites are related to, or derived from, the more familiar pathways of primary metabolism.

After brief introductory sections concerned with the possible biological significance of secondary compounds and experimental methods, Professor Luckner discusses the types of enzymes which are concerned with secondary metabolism and then turns to his main theme, which is to trace out the known synthetic routes to secondary compounds. He groups together

compounds derived from key precursors such as acetate, shikimic acid and individual protein amino acids, laying emphasis on their metabolic relationships rather than on their structural similarities, or biological functions. This treatment provides the reader with a feeling for the 'place' of individual secondary compounds in an integrated web of primary and secondary metabolism; a feeling which cannot be provided by a specialist volume on a specific group of compounds such as the alkaloids or flavonoids.

The one inevitable regret is that this book is now eight years old and the bibliography six years old. Nevertheless it still provides one of the few real guides to secondary metabolism which can be recommended to students of biology or biochemistry and with the new edition they may reasonably be expected to buy as well as borrow it.

E. A. Bell

*Immunochemistry of Enzymes and Their Antibodies*

Edited by Milton R. J. Salton

John Wiley and Sons; New York, London, Sydney, Toronto, 1977

ix + 230 pages. £ 14.25, \$ 24.15 (cloth)

The effect of antibodies on biologically active molecules has long been of interest to immunologists as a first step in the disposal (neutralization) of foreign macromolecules. The topic has also been of interest to biochemists and cell biologists as a tool for the study of the functional role of different surface regions of enzyme molecules. Immunological methods can contribute to our understanding of evolution of

enzymes and of species, and thus to taxonomy, to a study of enzyme location within the cell or within the cell membrane, and to comparison of isofunctional enzymes from different tissues of the same animal. These fields of biology and the techniques which are employed in their study can obviously not be considered systematically in a slim volume of 230 pages, unless a single author attempted to integrate the