

blight on potato have lost their effectiveness in several countries after having only been in use for about five years.

The biotransformation of pesticides and other xenobiotics in plants and soils is considered by V. T. Edwards and A. L. McMinn of Shell research in a 62 page chapter, which specifically covers the literature of 1980–1982. There are also two more general chapters on methodology, one by J. B. Pillmoor and T. R. Roberts of Shell on non-extractable pesticide residues in plants and another by E. Möllhoff of Bayer AG on experimental approaches to plant metabolic studies. The latter is a translation from the German and this is unfortunately

apparent in a few places where the meaning is not entirely clear. Otherwise, this is an excellent survey of methods that can be used to follow the fate of labelled compounds in plant systems and will be of general interest.

The remaining two chapters not yet mentioned cover genetic toxicology and the fate of insecticides in economic animals. Overall, the volume is well produced with many illustrative formulae and tables and excellent reference lists; my only grumble is the significant delay of over two years between literature coverage and publication.

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**Selective Toxicity: the Physico-chemical Basis of Therapy:** by ADRIAN ALBERT, seventh edition. Chapman & Hall, London, 1985. 750 pp. £40 hardback, £19.75 paperback.

This is one of those rare books that you can never put down; as you thumb through looking up one point, you always find something else that catches your eye. Also, the author does not eschew the human aspect of scientific discovery and there are some delightful historical asides. I remember consulting an earlier edition, which was much shorter than this one. Indeed in 1951, when the first edition appeared, the relationship between chemical structure, molecular shape and biological activity was a relatively new subject. A host of new drugs and pesticides have been introduced since then, information has accumulated and this latest edition has 657 pages of closely packed text. This is followed by 3000 references to the literature, a subject index and a complete index to the 650

structural formulae which are liberally distributed on almost every page.

Ostensibly, this text deals with chemotherapy and the selective activities of modern synthetic drugs and is aimed primarily at medical and pharmacy students. However, it contains a wealth of information on many other aspects of biological chemistry, including plant crop protection agents and herbicides and it will interest many other scientists as well. For example, there is much basic chemical information included on ionization, metal-binding, molecular shape, steric factors and surface phenomena. Indeed, it is a fascinating and highly instructive work and all those interested in structure-activity relationships or the comparative biochemistry of life will need to have it on their shelves. At just under £20, it is an excellent buy and it can be warmly recommended.

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