

criteria. I felt that they were fully met by the reviews of Fridovich on 'Superoxide and evolution', Kenney on 'Isoenzymes', Zakim on 'Abnormal enzymes', and Vessey and Zakim on 'Membranes'. There are many other reviews available on all these topics, but those in '*Horizons*' scored by being informative and interesting without being incomprehensible to non-specialists in the field. I felt that the reviews of Singer and Gutman on 'Coupling site 1', Ackrell on 'Oxaloacetate', and Palmer and Coleman on 'NADH oxidation in mitochondria' were slightly less readable, but still very much worth the effort.

The review of Kearney and Kenney on enzymes with

covalently-bound flavins was good and clear, but it might be argued that the subject matter was too restricted for '*Horizons*'. Finally, the review of Arnon and Buchanan on 'Ferredoxins and photosynthesis' was clear and interesting, but I must admit to being prejudiced against it, having seen so many recent reviews dealing with ferredoxins!

Overall, I feel that '*Horizons*' is a worthwhile series if the present standard of articles can be maintained. I have no hesitation in recommending Volume 1.

Barry Halliwell

### *The Flavonoids*

Edited by J. B. Harbone, T. J. Mabry and Helga Mabry  
Chapman and Hall; London, 1975  
xiv + 1204 pages. £ 27.50

The editors, a formidable trio of flavonoidologists, have done for flavonoids what Otto Isler recently did for another important group of plant products, the carotenoids. The length and weight of both books are very much the same and are both impressive, although there is probably slightly less information in *The Flavonoids* because of the use of a different typeface. The fifteen classes of flavonoid compounds are described in eleven chapters covering some six hundred and fifty pages, so the thoroughness of the treatment is obvious. These chapters are preceded by more general and, to an uncommitted reader, rather more attractive chapters on techniques for isolating flavonoids and on the use of spectroscopy in its various guises for studying flavonoids; one of the editors, T. J. Mabry, has effectively contributed to this section. One chapter is devoted to a consideration of flavonoid biosynthesis, which has recently blossomed following important enzymic and stereochemical studies. There follow chapters on the metabolism and function of flavonoids; these topics have only recently been seriously

studied and whilst metabolism seems to be well established, function still has a number of grey areas. However both chapters give balanced accounts of the present state of the subject. In the last two chapters we have an authoritative account of Flavonoid Systematics and an imaginative treatment of Flavonoid Evolution, respectively.

Biochemists who are inhibited by the word 'plant' should look at this book to see what levels of sophistication some aspects of plant biochemistry have now achieved. But that said, this important book is essentially a book for specialists and no researchers concerned with flavonoids can afford to be without it although at £ 27.50 it may be beyond the means of many young academics in the U.K. We should all be grateful to the editors for collecting such an outstanding group of authors and then persuading them to write chapters which interact so effectively.

T. W. Goodwin