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Book Reviews

Absorption and Utilization of Amino Acids, Vols I, II, III. Edited by M. Friedman, CRC Press, Inc., Florida, 1989. Vol. I, 257 pp. ISBN 0 8493 6006 4. Price £106·00. Vol. II, 301 pp. ISBN 0 8493 6007 2. Price £113·50. Vol. III, 321 pp. ISBN 0 8493 6008 0. Price £113·50.

This book contains 45 contributed chapters in three volumes. Unfortunately space does not permit a detailed description of the chapters but the following topics are covered:

1. Amino acid absorption, transport, metabolism and utilization;
2. Bioavailabilities of amino acids from different sources;
3. Amino acid imbalances, antagonisms and toxicities;
4. Metabolic interrelationships of amino acids;
5. Species variation in the utilization of amino acids;
6. Enteral and parenteral nutrition;
7. Amino acids and disease;
8. Detoxification of drugs and xenobiotics by amino acids;
9. Chemical, biochemical and other indices of amino acid utilization;
10. Analysis of amino acids in foods, body fluids and tissues

The book was intended for research scientists from many disciplines from human to animal nutritionists to pharmacologists and physicians. Its aim was to catalyze progress and permit the widest possible interaction of viewpoints and expertise on amino acid absorption and utilization in different species, including humans and ruminants. This has been achieved and the standard of most contributions is excellent with very up-to-date

references. Unfortunately the topics, which were intended to overlap, also overlap volumes, e.g. there are chapters on amino acids and disease and on ruminants in all three volumes. This may have been to ensure that all three volumes would have to be purchased, but the volumes could still have been much better organized for the convenience of the reader. There is also a good case for combining the three volumes which might have reduced the cost which, in the current economic climate, is so high that it is unlikely to appear on shelves of many UK libraries. Since only one chapter has been contributed by UK scientists, perhaps due to the decline in funding for such work, there might not be much demand anyway.

Most chapters were reviews but others were little more than short research papers, e.g. Ch. 2 (Vol. III) on the determination of urinary 3-methylhistidine and its use in measuring muscle protein breakdown in uraemic patients. This is one of the two chapters on the analysis of amino acids, and coverage of this topic is the weakest part of the whole book. Most of the research described in the book involves analysis of amino acids in foods, body fluids or tissues. However the samples (Reseda flowers or seeds) chosen by the authors of Ch. 17 (Vol. III), to illustrate techniques have little relevance to the subject of the book. This chapter also contains many errors some of which, such as the strength of hydrochloric acid and the length of hyrolysis (p. 280), could lead to incorrect values for amino acids in protein hydrolysates.

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Studies in Natural Products Chemistry, Volume 7: Structure and Chemistry. Edited by Atta-ur-Rahman. Elsevier, Amsterdam, 1990. x + 528 pp. ISBN 0 444 88829 2. Price: US$179·50.

The topics discussed in this series of volumes are nothing if not varied, and this present volume is no exception. It also contains a number of firsts. For example Derek Banthorpe provides a comprehensive account of his group's work with tissue cultures that produce terpenoids. He also includes much information of general utility to those who would like to use tissue cultures but have hitherto viewed the technology as a 'black art'. A second novel chapter (by W. Gaffield) includes discussion of the relevance of chirality to biological activity. There is special mention of the glycosidase inhibitors, like swainsonine and castanospermine, and the teratogenic steroidal alkaloids.

Five chapters cover the constituents of, *inter alia*, mangrove plants, echinoderms (toxins), the *Simaroubaceae* (quassinoids), African plants used in traditional medicine, and the genus *Artemesia*. This last chapter contains extensive tables of compounds with their occurrence and 437 references!