Insect Biochemistry and Function

Edited by D. J. Candy and B. A. Kilby Chapman and Hall; London, 1975 xii + 314 pages. £8.50: ISBN 0412117703

The title of this book suggests a comprehensive account of insect biochemistry, but in fact reviews of three areas of interest are included: the biochemistry of insect flight, excretion in insects, and synaptic transmission in insects. The editors point out in their introduction that a few topics have been selected which seem to deserve treatment at this time.

The first topic, a detailed picture of how insect flight muscle can maintain a very high rate of metabolism, is presented in two chapters. B. Sacktor reviews the utilization of fuel by muscle, and E. Bailey describes fuel supply. The biochemistry of excretion is discussed by D. G. Cochran, who includes useful physiological details where necessary. Finally, a short chapter by G. G. Lunt describes synaptic transmission in insects, a field which the author points out has been largely neglected by biochemists. Each chapter is well documented with many recent references, and the book as a whole is well produced.

Some aspects of insect biochemistry are treated in recent accounts of insect physiology [1,2], while other reviews of selected areas of insect biochemistry have appeared [3-5]. The topics covered in this

book are discussed in more detail than is possible in wider accounts of the field [6]. However, it is a pity that more chapters of similar quality could not have been added to justify the breadth of the title and to provide a really comprehensive study of insect biochemistry. Even so, the book will interest students of insect biochemistry and of comparative biochemistry, and will be a valuable reference text for those particularly concerned with the specific topics covered.

- [1] The Physiology of Insecta, (1974) (M. Rockstein, ed) Academic Press; New York and London.
- [2] Wigglesworth, V. B. (1972) The Principles of Insect Physiology, 7th Edn, Chapman and Hall; London.
- [3] Aspects of Insect Biochemistry, (1965) (T. W. Goodwinged) Academic Press; New York and London.
- [4] Chen, P. S. (1971) Biochemical Aspects of Insect Development, S. Karger; Basel.
- [5] Gilmour, D. (1965) The Metabolism of Insects, Oliver and Boyd; Edinbugh.
- [6] Rees, H. H. (1976) Insect Biochemistry, Chapman and Hall; London.

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Cell Patterning

Edited by Ruth Porter and J. Rivers Elsevier/Excerpta Medica/North-Holland; Amsterdam, Oxford, New York, 1975 viii + 356 pages. Dfl. 62.50, \$26.95

This book is the transcript of 14 lectures and discussions held during the 1974 CIBA Symposium on

Cell Patterning. The symposium's aim was to throw light on the question of how cells become grouped