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BOOK REVIEWS

DAY, M. J.: *PLASMIDS*. — Edward Arnold Ltd., London 1982. 52 pp. Net UK price £ 2.50.

The book about plasmids has been published as number 142 of the “Studies in Biology” series edited by the Institute of Biology, London. The aim of this book is to give the reader an insight into the biology of plasmids. The principles of the subject are outlined in the initial two chapters dealing with definition of plasmids, their structure and physical characteristics, genetic identification, and factors affecting plasmid distribution. The following four chapters give instructive information about the plasmid coded functions in bacterial hosts — Bacteriocins, Resistance plasmids, Catabolic plasmids and Plasmids involved in pathogenicity. The final two chapters are dedicated to the problems: Evolutionary mechanism of plasmids (the origin of plasmids, plasmid stability, relationships between plasmids, host range, IS and transposons) and The role of plasmids in applied biology (hospital acquired infections, plasmid involvement in soil and water systems). At the very end of the book the questions of recent plasmid research are summarized.

The book has many instructive figures and some very interesting electron microscope pictures. It should be read by all who need for their research or teaching basic knowledge of plasmid function in bacterial cell physiology and genetics.

P. TICHÝ (*Praha*)

CUTLER, D. F., ALVIN, K. L., PRICE, C. E. (ed.): *THE PLANT CUTICLE*. Linnean Society Symposium Series Number 10. Academic Press, London—New York—San Diego—San Francisco—Sao Paulo—Sydney—Tokyo—Toronto 1982. 461 pp. US \$ 99.50, £ 48.40.

Cuticle structure, development and function are not yet fully understood, the evidence from experiments and observations being interpreted differently by various authors. Many contradictory viewpoints were expressed at the tenth Symposium of the Linnean Society, held at Burlington House in London, 8–11 September 1980. A wide range of aspects of the plant cuticle are covered in 27 papers presented there and published in this volume. Some of those papers review the state of contemporary knowledge, others present results of more specialized studies and are concerned with particular aspects of the subject. The book is divided into four sections, the first of which contains seven papers on structure, histochemistry, ultrastructure and functions of the cuticle. Seven papers of the second part are concerned with epicuticular secretions *i.e.* chemistry, morphology and fine structure of epicuticular waxes and flavonoid aglycones. The third section consists of eight papers on cuticular permeability and penetration of pesticides, plant growth regulators and other compounds through cuticle to plant tissues. The final part contains five papers devoted to the evolutionary and ecological significance of the cuticle, possibility of using cuticular features in taxonomy and identification and discusses the relationship between sculpturing types and plant habitats.

The book brings together a wide range of papers on cuticle presenting information which normally would be scattered in a number of publications. It will be an indispensable source of valuable information and references.

JARMILA SOLÁŘOVÁ (*Praha*)