BOOKS RECEIVED

The genus *Yersinia*: epidemiology, molecular biology and pathogenesis

Edited by J. K. PRPIC and R. B. DAVEY. 1987. Contributions to Microbiology and Immunology series, vol. 9. S. Karger AG, Basle. Pp. x and 345. £127.30.

This volume, representing the proceedings of the Fourth International Symposium on *Yersinia* held in Australia in May 1986, comprises 51 contributions from internationally acclaimed experts and contains some outstanding and authoritative chapters on diverse aspects of *Yersinia* and yersiniosis. An excellent introductory chapter on the history of *Yersinia* by one of its illustrious champions, Professor H. Mollaret, is followed by chapters dealing with revised biogroupings of *Y. enterocolitica*, epidemiological and clinical studies, new chemotherapeutic agents and the prognosis of *Yersinia* infections. Had these topics been dealt with in formal sections, it would surely have emerged that there was considerable imbalance with regard to the different subject areas covered; certainly, survey after survey (16 chapters in all) on epidemiological aspects in country after country made for repetitive reading and, overall, this reader experienced a certain sense of *deja vu* and the impression that, even with such overkill, our understanding of the epidemiology of yersiniosis was little advanced.

The second half of the book includes contributions on the surface structures, virulence properties, modern diagnostic procedures and genetic aspects of *Yersinia*. This was altogether more satisfactory and afforded an excellent perspective of the exciting research developments taking place on *Yersinia* in so many laboratories worldwide. It went some considerable way to justifying the publicity claim that the volume provided an excellent overview of the then current knowledge of *Yersinia*. A notable feature throughout this book is the outstanding quality of its figures, photographs and electronmicrographs, setting a high standard that others should strive to match. The stated aim of the symposium was "to provide a focus for the advances made over the period since the Third Symposium, to allow the data to be reassessed and to perceive new directions for research which might prove fruitful". That aim seems to have been completely fulfilled in the sense that the book so successfully highlights the excitement and challenge of research in this fast-moving field.

Inevitably with a book that is a compilation of symposium proceedings by so many international contributors, the standard of presentation varies among the different chapters. There is ample evidence that the editors chose not to edit the original contributions too stringently with the sad result that certain chapters read too much like the original oral presentations that they clearly were. A more ruthless editorial approach might have resolved that problem; it would certainly have identified the repetition that was all too apparent among, for example, the epidemiology chapters and which could

have been pruned with obvious improvement to the whole text. Again, even allowing that this is a multi-author volume, there is little excuse for the many typographical and other errors which have remained in the final version and which caused irritation.

This is not a book to be read from cover to cover and, at £127.30, it is expensive and probably beyond the means of many individual readers. Nevertheless, it will fulfil an essential role as an excellent reference source for specialist and non-specialist readers from a wide variety of disciplines in search of recent, relevant data on an exciting group of bacteria described elsewhere as charismatic.

DAVID C. OLD

Pathogenesis and immunity in pertussis

Edited by A. C. WARDLAW and R. PARTON. 1988. John Wiley & Sons Ltd, Chichester. Pp. xxiv and 482. £55.00.

The stated purpose of this book is to bring together in one volume a summary of current knowledge of pathogenesis and immunity in pertussis. To this end, the editors have assembled contributions by 31 authors. The first chapter, on "Pertussis today", effectively reviews the entire field covered by the book. This provides a useful overview although the author's opinions on taxonomy of the genus *Bordetella* would not be shared by the majority and are certainly at variance with the genetic evidence discussed in chapters 3 and 16. The second chapter, on the growth of *B. pertussis*, provides useful practical information on the culture of the organism and the effect of different growth conditions on the production of the various components associated with pathogenicity. The coverage of more basic information on metabolism and nutrition is rather sketchy and I would have found a more in-depth review of these aspects useful at this point. The chapter on the genetics of virulence is comprehensive and a useful introduction to the subject, although it is not clear why the authors chose to have the section on mutants defective in virulence components near the beginning, before more fundamental aspects of genetics had been discussed. The remainder of the first half of the book deals with the multiplicity of toxic factors and the adhesins of *B. pertussis*. Inevitably, pertussis toxin receives considerable attention, covering four chapters, although useful reviews are also presented on the adenylate cyclase and the heat-labile (dermonecrotic) toxin, tracheal cytotoxin and lipopolysaccharide endotoxin. Later chapters discuss the clinical aspects of pertussis, the serological response, animal models for the disease, the host-parasite relationship, whole cell and acellular vaccines and adverse reactions to these, and epidemiological aspects of pertussis. All these chapters contain valuable information although I would have preferred to have those on the clinical and epidemiological aspects towards the beginning of the book rather than at the middle and end, respectively. I would also have found a concluding chapter, which highlighted areas of particular importance for future research, very useful. Inevitably, in a multi-author work of this type there is a certain