

## Book Review

*Escherichia coli in Domestic Animals and Humans*. C. L. GILES, ed. Pp. 672.  
Wallingford, Oxon.: CAB International; 1994. £75 (US \$135). ISBN  
0 85198 9217.

Bacteria cause disease in human beings and other animals. In many instances advances in veterinary medicine are reflected in advances in human medicine at a later date. This relationship is exemplified by diseases caused by *E. coli*. Our understanding of the role of *E. coli* in diarrhoeal disease in weanling animals has led to major advances in our understanding of weanling diarrhoea in human babies. Indeed the understandings of the pathogenesis of infection in weanling piglets led to the basic model that is used for unravelling the pathogenesis of many infective agents. From these studies springs our understanding of the basic two stage system. Stage one adhesion and stage two toxin, K88 antigen and the enterotoxins of *E. coli* being the first to be fully understood.

The present book illustrates the range of diseases caused by *E. coli* and the variety of hosts that are susceptible. *E. coli* produces diseases in calves, sheep, pigs, poultry, rabbits, cats, dogs, goats and horses as well as in humans. Eleven of the 22 chapters are devoted to descriptions of diseases. *E. coli* is the bacterium most used by molecular biologists and this combined with the range of animal hosts available for experimentation has resulted in a detailed understanding of many aspects of its virulence mechanisms. Seven chapters are devoted to the virulence factors. Of the remaining four chapters, three are devoted to the biology of the organism and the fourth to the vaccines that have been produced against various diseases.

Is this a useful book? There have been a number of other monographs written about *E. coli*; these have included discussion about its toxins, pathogenesis of infection and their molecular biology. The range of infections and the number of species involved that are covered in this book are unrivalled. This treatment expands the context in which medical microbiology is normally considered. Those involved in clinical microbiology whether in clinical practice or research would benefit from insights that this book would provide.

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