

Book Review

The Biology of Blood-Sucking in Insects 2nd Edn. By M. Lehane, pp. 321. Cambridge University Press, 2005. ISBN 0 521 54395 9. Paperback £35.00 (US\$ 60.00). doi:10.1017/S003118200500911X

Fourteen years ago I had the pleasure of reviewing the first edition of Mike Lehane's book. This new edition, long overdue, provides perhaps the most comprehensive, and a very readable, teaching text for medical entomology available today. The title truly reflects the content. Written from a biologist's viewpoint, we are treated to an overview of how blood-feeding insects function rather than the drier, phylogenetic-based treatment that is much more common. The scene is set by two chapters dealing with the importance and evolution of blood-feeding insects. We are then led, chapter-by-chapter through the blood-feeding process from host selection through to the digestion and utilization of a bloodmeal. The penultimate two chapters consider respectively the more intricate interactions of insects with their hosts and the parasites that they transmit. The classification of blood-feeding insects is covered in a final chapter.

Having a single author ensures that there is continuity in writing style and format throughout, and, refreshingly unusual for a book of this sort, the author often expresses his opinions rather sticking to a purely factual presentation. The author has sought out unusual examples to illustrate points, for example including the blood-feeding moths in the evolutionary overview. The single viewpoint can,

conversely, lead to some lack of balance as in the consideration of blood-feeding being a density-dependent process (which in anopheline mosquitoes is not the case). Covering such a field in an egalitarian way is a real challenge for a single author and this is reflected in that some subjects (e. g. insect immunity) are given real in-depth coverage and while others (e.g. sensory biology associated with odour detection) are dealt with more superficially. Nevertheless, the book provides an excellent start point for students and researchers into all the subject areas associated with blood-feeding insects and the extensive reference list is a springboard for those wishing to read further.

Apart from a few typos, the book is almost error-free. The legends to figures and tables are variable, and much more detail would have been useful in some legends in order to orientate the reader. Indeed, while there are plenty of figures, the presence of more photographs (especially in colour) would not have gone amiss (though would undoubtedly have increased the cost).

This is a great follow-up to a good first edition. *The Biology of Blood-Sucking in Insects* will be used by teachers of medical entomology, and the cost leaves it well within the student budget. I will be recommending this excellent text to my students.

PETER F. BILLINGSLEY
School of Biological Sciences
University of Aberdeen
Tillydrone Avenue
Aberdeen AB24 2TZ, UK