

# Medical and Veterinary Entomology, 2nd Edition

*D S Kettle, Emeritus Professor, Department of Entomology,  
University of Queensland, Australia*

The first edition of this book, published in 1984, established itself internationally as a standard text in medical and veterinary entomology. This new edition retains the same overall aims and structure but has been thoroughly revised to take account of new advances in the subject.

The main focus of the book is on the general biology of insects and the Acari (mites and ticks) of medical and veterinary importance, together with brief descriptions of their taxonomy and of the treatment of diseases they cause. The book consists of 32 chapters and is divided into three parts: the first provides a general introduction to the classification, structure and function of the relevant insects and Acari; the second covers, in seventeen chapters, the main groups of insects and acarines of medical and veterinary importance, from the Culicidae (mosquitoes) to the Ixodidae (hard ticks); part three then provides an overview of those diseases of which the pathogens are transmitted by insects or acarines.

## **Contents:**

Part I: General introduction to medical and veterinary entomology

Part II: Insects and acarines of medical and veterinary importance

Part III: Diseases of which the pathogens are transmitted by insects of acarines

From reviews of the first edition:

*'This is an important and comprehensive account of pests and vectors attacking man and his livestock...an excellent book that will remain a standard reference source that I, and I am sure many others, will use for a long time.'*

M W Service, *Annals of Tropical Medicine and Parasitology*

*'...the work must be regarded as a classic text book of its kind, and an invaluable reference book for both pure entomology and the parasitology of arthropod-borne pathogens.'*

N R H Burgess, *International Pest Control*

*'...if only one general reference book on medical and veterinary entomology can be afforded by either a library or an individual, then it should be this.'*

R P Lane, *Entomologist's Monthly Magazine*

*'...from time to time books are published that make one wish they had appeared at a much earlier stage in one's working life. This book is one of them!*

M T Gillies, *International Journal of Epidemiology*

**Readership:** A major reference text for students taking courses in zoology, tropical medicine, veterinary science, entomology and parasitology, as well as for professionals working in both pure and applied entomology.

October 1995      720 pages      HB/PB  
ISBN 0 85198 968 3 HB    Price: £75.00 (US\$135.00 Americas only)  
ISBN 0 85198 969 1 PB    Price: £37.50 (US\$70.00 Americas only)

For further information or to order please contact CAB INTERNATIONAL headquarters or an exclusive CAB INTERNATIONAL distributor in your area.

*Please add £2.00 per book postage and packing (excluding UK).*

## **CAB INTERNATIONAL**

Headquarters, Wallingford, Oxon OX10 8DE, UK. Tel: (01491) 832111 Telex: 847964 (COMAGG G) Fax: (01491) 833508 E-mail: [cabi@cabi.org](mailto:cabi@cabi.org)  
North America, 845 North Park Avenue, Tucson, Arizona 85719, USA. Tel: 800/528-4841 520/621-7897 Fax: 520/621-3816 E-mail: [cabi-nao@cabi.org](mailto:cabi-nao@cabi.org)  
Africa, PO Box 76520, Nairobi, Kenya. Tel: Nairobi 747 340/337 Telex: 22040 ILRAD (KE) (for IIBC Muguga) Fax: Nairobi 747 340 E-mail: [cabi-iibc-kenya@cabi.org](mailto:cabi-iibc-kenya@cabi.org)  
Asia, PO Box 11872, 50760 Kuala Lumpur, Malaysia. Tel: (03) 255 2922 Telex: 28031 (MA CABI) Fax: (03) 255 188 E-mail: [cabi-aro@cabi.org](mailto:cabi-aro@cabi.org)  
Caribbean, Gordon Street, Curepe, Trinidad and Tobago. Tel: 809 662 4173 Telex: 24438 (CARIRI) Fax: 809 663 2859 E-mail: [cabi-cro@cabi.org](mailto:cabi-cro@cabi.org)

# Parasitology for the 21st Century

Edited by M Ziya Alkan and M Ali Özcel, ICOPA Secretariat, Izmir, Turkey

This volume provides a reflective summary of research in parasitology in the late 20th Century combined with a vision of the major challenges and potential successes in the 21st Century. It has been compiled from selected papers presented at the Eighth International Congress of Parasitology (ICOPA). A wide variety of topics are covered including medical, veterinary, and plant parasitology, by contributors from many different countries. Chapters within the book consider current research on the biology of parasites, and new strategies in the transmission and control of parasitic diseases.

This book represents an invaluable resource for all parasitologists. Not only is it an up-to-date summary of research, but it is also a thought provoking look at the future.

## Contents:

- New dimensions for parasitology in the 21st century, *T Godal*
- Training in parasitology, *R Houin*
- Immunity to human leishmaniasis, *H A Kuffo et al.*
- Immunoregulation in visceral leishmaniasis, *E M Carvalho*
- Epidemiology of visceral leishmaniasis and its control, *R C Mahajan and K Mohan*
- Vaccination against visceral leishmaniasis using a pure parasite protein, *C L Jaffe, N Rachamim and R Sarfstein*
- Visceral leishmaniasis (VL) in Iran and the role of serological tests in diagnosis and epidemiological studies, *Gh H Edrissian*
- Differential cause of T-cell non-responsiveness to *Plasmodium falciparum* antigens in healthy individuals and in acutely ill malaria patients, *L Hviid*
- Iron, oxidant stress and malaria, *J Golenser*
- Immunogenicity of multiple peptides (MAPs) containing T- and B-cell epitopes of *Plasmodium falciparum* CS proteins, *E H Nardin et al.*
- Cell biology of the *Giardia lamblia* life cycle, *F D Gillin et al.*
- Metabolic disturbances in children with chronic giardiasis, *N N Taneli*
- Amoebae in relationship with bacteria in their environment, *C Harf*
- Molecular and cellular biology of invasion by *Entamoeba histolytica*, *S R Reed et al.*
- Multidrug resistance gene family in *Entamoeba histolytica*, *P Ayala et al.*
- Cytoskeleton activities in pathogenic *Entamoeba histolytica*, *N Guillen et al.*
- Infection sources, reservoir and transmission of pneumocystosis, *E Dei-Cas et al.*
- Schistosomiasis and foodborne trematode infections: diseases of social dimensions, *K E Mott*
- Genetic variability in parasitic helminths, *D P McManus*
- Allergic reactivity and helminthic infection, *N R Lynch*
- Protective immune mechanisms against *Echinococcus multilocularis*, *B Gottstein*
- Host-Metacestode interplay: the role of macrophages, *J B Dixon*
- Epidemiology and epidemiologic research methods - their application in parasitic disease investigation, *K C Shekhar*
- Importance of abdominal angiostrongylosis in the Americas, *P Morera*
- PCR-based detection and typing of parasites, *G L McLaughlin et al.*

**Readership:** Parasitologists and others concerned with human health (especially tropical medicine) and veterinary science.

January 1996 304 pages HB  
ISBN 0 85198 777 2 Price: £55.00 (US\$99.00 Americas only)

For further information or to order please contact CAB INTERNATIONAL headquarters or an exclusive CAB INTERNATIONAL distributor in your area.

Please add £2.00 per book postage and packing (excluding UK).

## CAB INTERNATIONAL

Headquarters, Wallingford, Oxon OX10 8DE, UK. Tel: (01491) 832111 Telex: 847964 (COMAGG G) Fax: (01491) 833508 E-mail: [cabi@cabi.org](mailto:cabi@cabi.org)  
North America, 845 North Park Avenue, Tucson, Arizona 85719, USA. Tel: 800/528-4841 520/621-7897 Fax: 520/621-3816 E-mail: [cabi-nao@cabi.org](mailto:cabi-nao@cabi.org)  
Africa, PO Box 76520, Nairobi, Kenya. Tel: Nairobi 747 340/337 Telex: 22040 ILRAD (KE) (for IIBC Muguga) Fax: Nairobi 747 340 E-mail: [cabi-iibe-kenya@cabi.org](mailto:cabi-iibe-kenya@cabi.org)  
Asia, PO Box 11872, 50760 Kuala Lumpur, Malaysia. Tel: (03) 255 2922 Telex: 28031 (MA CABI) Fax: (03) 255 188 E-mail: [cabi-aro@cabi.org](mailto:cabi-aro@cabi.org)  
Caribbean, Gordon Street, Curepe, Trinidad and Tobago. Tel: 809 662 4173 Telex: 24438 (CARJRI) Fax: 809 663 2859 E-mail: [cabi-cro@cabi.org](mailto:cabi-cro@cabi.org)

## NOTES FOR AUTHORS

The *Journal of Helminthology* publishes papers and reviews on all aspects of pure and applied helminthology, particularly those helminth parasites of environmental health, medical or veterinary importance. For those wishing to contribute research papers, work on helminths in wildlife hosts including plant and insect parasites will also be welcome. Taxonomic contributions will be acceptable if they contribute to the systematics of a group and particularly if they employ biochemical or molecular biological techniques.

**Page Format.** The *Journal* is printed in a two-column format (column width of 80 mm) with a text area of 170×225 mm.

**Text.** Papers should be typed, on one side of the paper only, with double line spacing and ample margins (at least 1.5 cm) on each side with no underlining or bold in text except for scientific names. Draft quality print from a word-processor is not acceptable. Standard abbreviations (e.g. fig. and figs) and metric units must be used.

When the paper has been accepted word-processed text stored on floppy disk is encouraged, providing the software is IBM/DOS compatible, but floppy disks must be accompanied by a hard copy. This will enable papers to be handled rapidly, and with fewer type-setting errors.

**Abstract.** Each paper must commence with a carefully prepared, accurate, informative abstract, in one paragraph, that is complete in itself and intelligible without reference to text or figures. It should not exceed 250 words. A short title should be provided as a running head.

**Tables.** Tables should be reduced to the simplest form, and should not be used where text or illustrations give the same information. They should be submitted on separate sheets at the end of the article and must fit conveniently into single column, full width or landscape (if absolutely necessary) format. Table captions should be typed on a separate sheet.

**Illustrations.** Copies only of artwork should be submitted. The original illustrations should accompany the paper after acceptance and revision. Text figures, line drawings, computer-generated figures and graphs should be of sufficient size and quality to allow for reduction by half or two-thirds. Halftone photographs are acceptable where they are a real contribution to the text. They should be glossy prints of the same size as they are to appear in the *Journal*. All figures and letters on photographs must be inserted by the author. Figure and captions should be typed on a separate sheet.

**Voucher specimens.** The deposition of voucher specimen should be considered where appropriate.

**References.** References must be based on the name and year system, give full journal titles and conform to the following styles:

- Grønvold, J., Wolstrup, J., Larsen, M., Henriksen, S.A. & Nansen, P.** (1993) Biological control of *Ostertagia ostertagi* by feeding selected nematode-trapping fungi to calves. *Journal of Helminthology* **67**, 31–36.
- Grove, D.I.** (1990) *A history of human helminthology*. 850 pp. Wallingford, CAB International.
- Southgate, V.R. & Rollinson, D.** (1987) Natural history of transmission and schistosome interactions. pp. 347–378 in Rollinson, D. & Simpson, A.J.G. (Eds) *The biology of schistosomes: from genes to latrines*. London, Academic Press.

Citation of authors in the text should appear in the form: Polaszek (1990) or (Polaszek, 1990). More than one author should be cited in chronological order as: (Holloway *et al.*, 1987; Walker & Huddleston, 1988).

**Offprints.** 50 copies of each paper are provided free to the author (or major author) of each paper. Further copies may be obtained on payment, and the number required should be specified and ordered at proof stage.

**Manuscript.** Three copies of the manuscript, which must be in English, should be accompanied by a letter signed by all the authors and together with artwork submitted to:

**The Editor**  
**Journal of Helminthology**  
**International Institute of Parasitology**  
**395A Hatfield Road**  
**St Albans, Herts**  
**AL4 0XU, UK.**

# Journal of Helminthology

## Review Article

- Whittington, I.D. Benedeniine capsalid monogeneans from Australian fishes: pathogenic species, site-specificity and camouflage ..... 177

## Research Papers

- Bucknell, D., Hoste, H., Gasser, R.B. & Beveridge, I. The structure of the community of strongyloid nematodes of domestic equids ..... 185
- El-Mayas, H. & Kearns, G.C. *In vitro* excystment of the metacercaria of *Bucephalus haimeanus* from the common goby (*Pomatoschistus microps*) ..... 193
- Galaktionov, K.V., Malkova, I.I., Irwin, S.W.B., Saville, D.H. & Maguire, J.G. Developmental changes in the tegument of four microphallid metacercariae in their second (crustacean) intermediate hosts ..... 201
- Lee, J.D., Wang, J.J., Chang, J.H., Chung, L.Y., Chen, E.R. & Yen, C.M. Role of T cell subpopulations in mice infected with *Angiostrongylus cantonensis* ..... 211
- Marcogliese, D.J. Evidence for specificity of *Steganoderma formosum* for its second intermediate host in the Northwest Atlantic ..... 215
- Mathis, A., Deplazes, P. & Eckert, J. An improved test system for PCR-based specific detection of *Echinococcus multilocularis* eggs ..... 219
- Ogbogu, V.C. & Storey, D.M. Ultrastructure of the alimentary tract of third-stage larvae of *Litomosoides carinii* ..... 223
- Ooba, C., Nakamura, Y. & Taira, N. Larval somatic antigens effective in inducing an IgG response and protection against *Strongyloides papillosus* infection ..... 231
- Rusinek, O.T., Bakina, M.P. & Nikolskii, A.V. Natural infection of the calanoid crustacean *Epischura baicalensis* by procercooids of *Proteocephalus* sp. in Listvenichnyi Bay, Lake Baikal ..... 237
- Shekhar, K.C., Pathmanathan, R. & Krishnan, R. Human infection with *Dirofilaria repens* in Malaysia ..... 249
- Siles-Lucas, M. & Cuesta-Bandera, C. *Echinococcus granulosus* in Spain: strain differentiation by SDS-PAGE of somatic and excretory/secretory proteins ..... 253
- Willingham, A.L., Ockens, N.W., Kapel, C.M.O. & Monrad, J. A helminthological survey of wild red foxes (*Vulpes vulpes*) from the metropolitan area of Copenhagen ..... 259
- Research Notes
- De Bont, J., Vercruyse, J. & Massuku, M. Variations in *Schistosoma mattheei* egg morphology and viability according to age of infection in cattle ..... 265
- Mohapatra, R., Ranjit, M.R. & Dash, A.P. The effect of chitin synthesis inhibitors on the development of *Brugia malayi* in *Aedes aegypti* ..... 269

© CAB INTERNATIONAL, 1996

All rights reserved. No part of this publication may be reproduced, in any form or by any means, electronically, mechanically, by photocopying, recording or otherwise, without prior permission of the copyright owner.