



Cornell
University
Press

A major new book offering the
original articles on scientific
discoveries by some 161 of the great
workers in tropical medicine and parasitology . . .

Tropical Medicine and Parasitology

Classic Investigations

Edited by B. H. KEAN, M.D., KENNETH E. MOTT, M.D., and ADAIR RUSSELL. This valuable new two-volume work brings together the original articles, long inaccessible, on scientific discoveries by some 161 of the great workers in tropical medicine and parasitology. It offers key classic papers underlying present knowledge of the etiology, life cycle, transmission, clinical features, and pathology of 36 major parasitic diseases of man. An English translation is provided, where necessary, for each article, as well as a concise biography and a statement setting the contribution in perspective. Assembled, translated, and edited over a twelve-year period, the papers are reproduced chronologically. They serve as a superb guide to the experimental methods of eminent men of science from past decades such as Laveran, Fujii, Bilharz, Jankú, Lösch, and Manson. 972 pages/68 line illustrations, 49 black-and-white photographs, 4 color plates/Two volumes, \$50.00

CORNELL UNIVERSITY PRESS Ithaca, New York 14850

PARASITOLOGY

PARASITOLOGY

(*Founded by G. H. F. Nuttall, F.R.S.*)

EDITORS

D. W. T. CROMPTON and B. A. NEWTON

EDITORIAL ASSISTANT

M. ELISABETH PAINTER, Ph.D.

EDITORIAL BOARD

GWENDOLEN REES, F.R.S. (*Chairman*)

J. D. SMYTH*	L. G. GOODWIN, F.R.S.
D. R. ARTHUR	C. A. HOPKINS
S. COHEN	J. LLEWELLYN
S. R. SMITHERS	W. F. MAI

* Representing the British Society for Parasitology

PANEL OF REFEREES

R. ANDERSON	D. I. GIBSON	J. H. ROSE
J. R. BAKER	L. P. JOYNER	J. F. RYLEY
J. BARRETT	C. R. KENNEDY	G. SALT, F.R.S.
ELIZABETH U. CANNING	ANN M. LACKIE	K. VICKERMAN
L. H. CHAPPELL	D. L. LEE	D. WAKELIN
R. R. A. COOMBS, F.R.S.	R. J. LINCOLN	P. F. V. WARD
F. E. G. COX	S. H. P. MADDRELL	P. J. WHITFIELD
G. A. M. CROSS	BRIDGET M. OGILVIE	H. H. WILLIAMS
D. A. ERASMUS	M. ELAINE ROSE	C. A. WRIGHT

VOLUME 75, 1977

CAMBRIDGE UNIVERSITY PRESS

CAMBRIDGE · LONDON · NEW YORK

PUBLISHED BY
THE SYNDICS OF THE CAMBRIDGE UNIVERSITY PRESS
The Pitt Building, Trumpington Street, Cambridge CB2 1RP
Bentley House, 200 Euston Road, London NW1 2DB
32 East 57th Street, New York, N.Y.10022

© Cambridge University Press, 1977

CONTENTS

(All rights reserved)

PART 1 AUGUST 1977

	PAGE
NORTON, C. C., CATCHPOLE, JANET and ROSE, M. ELAINE. <i>Eimeria stiedai</i> in rabbits: the presence of an oocyst residuum	1
WHITFIELD, P. J., ANDERSON, R. M. and BUNDY, D. A. P. Experimental investigations on the behaviour of the cercariae of an ectoparasitic digenetic <i>Transversotrema patialense</i> : general activity patterns	9
RICHARD, JOSETTE. Cercariae of Microphallidae: determination of the genera <i>Microphallus</i> Ward, 1901 and <i>Maritrema</i> Nicoll, 1907 according to chaetotaxy	31
PERRY, R. N. The water dynamics of stages of <i>Ditylenchus dipsaci</i> and <i>D. myceliophagus</i> during desiccation and rehydration	45
JENKINS, SIMON N. and BEHNKE, JERZY M. Impairment of primary expulsion of <i>Trichuris muris</i> in mice concurrently infected with <i>Nematospiroides dubius</i>	71
BEHNKE, J. M., BLAND, P. M. and WAKELIN, D. Effect of the expulsion phase of <i>Trichinella spiralis</i> on <i>Hymenolepis diminuta</i> infection in mice	79
STURROCK, R. F., BUTTERWORTH, A. E., KARAMSADKAR, S. D., KIMANI, R., IMBUGA, M. and HOUBA, V. Eosinophilia in Kenyan baboons (<i>Papio anubis</i>) induced by <i>Trichinella spiralis</i> and <i>Schistosoma mansoni</i>	89
SHAW, J. R. and ERASMUS, D. A. <i>Schistosoma mansoni</i> : differential cell death associated with <i>in vitro</i> culture and treatment with Astiban (Roche)	101
WOOLHOUSE, N. M. and KAYE, B. Uptake of [¹⁴ C]oxamniquine by <i>Schistosoma mansoni</i>	111
SMITH, MARY D. The ultrastructural development of the schistosome egg granuloma in mice	119
MORZARIA, S. P., BLAND, PATRICIA and BROCKLESBY, D. W. The ultrastructure of penetrating stages of <i>Babesia major</i> infecting the ovary of <i>Haemaphysalis punctata</i>	125

PART 2 OCTOBER 1977

	PAGE
EGGITT, M. J., TAPPENDEN, L. and BROWN, K. N. Translation in a reticulo-cellular free system of RNA isolated from blood and culture forms of <i>Trypanosoma brucei</i>	133
JENNINGS, F. W., WHITELAW, D. D. and URQUHART, G. M. The relationship between duration of infection with <i>Trypanosoma brucei</i> in mice and the efficacy of chemotherapy	143
JOYNER, L. P. and NORTON, C. C. The anticoccidial effects of amprolium, dinitolmide and monensin against <i>Eimeria maxima</i> , <i>E. brunetti</i> and <i>E. acervulina</i> with particular reference to oocyst sporulation	155
SHIRLEY, M. W., MILLARD, B. J. and LONG, P. L. Studies on the growth, chemotherapy and enzyme variation of <i>Eimeria acervulina</i> var. <i>diminuta</i> and <i>E. acervulina</i> var. <i>mivati</i>	165
LONG, P. L., MILLARD, B. J. and SHIRLEY, M. W. Strain variation within <i>Eimeria meleagrinitis</i> from the turkey	177
RICKARD, M. D. and ADOLPH, A. J. Vaccination of lambs against infection with <i>Taenia ovis</i> using antigens collected during short-term <i>in vitro</i> incubation of activated <i>T. ovis</i> oncospheres	183
CLARK, I. A., RICHMOND, J. E., WILLS, E. J. and ALLISON, A. C. Intra-erythrocytic death of a parasite in mice recovering from infection with <i>Babesia microti</i>	189
PURVIS, ANNE C. Immunodepression in <i>Babesia microti</i> infections	197
HIGGINS, JACQUELINE C., WRIGHT, D. E. and MATTHEWS, R. A. The ultra-structure and histochemistry of the cyst wall of <i>Bucephalus haimeanus</i> (Lacaze-Duthiers, 1854)	207
PERRY, R. N. The effect of previous desiccation on the ability of 4th-stage larvae of <i>Ditylenchus dipsaci</i> to control rate of water loss and to survive drying	215
WILSON, P. A. G. The effect of the suckling stimulus on the migration of <i>Strongyloides ratti</i> in lactating rats	233
HOWARD, R. J. <i>Hymenolepis microstoma</i> : a change in susceptibility to resistance with increasing age of the parasite	241
GEORGI, J. R., GEORGI, M. E. and CLEVELAND, D. J. Patency and transmission of <i>Filaroides hirthi</i> infection	251
Proceedings of the British Society for Parasitology, 5-7 April 1977	i

PART 3 DECEMBER 1977

	PAGE
MAY, ROBERT M. Dynamical aspects of host-parasite associations: Crofton's model revisited	259
HENDERSON, D. The effect of worm age, weight and number in the infection on the absorption of glucose by <i>Hymenolepis diminuta</i>	277
GRAY, J. S. The diurnal migration of the fowl cestode, <i>Raillietina cesticillus</i>	285
CANNING, ELIZABETH U. and MADHAVI, R. Studies on two new species of Microsporidia hyperparasitic in adult <i>Allocreadium fasciatum</i> (Trematoda, Allocraeidae)	293
BAKER, R. A. Nutrition of the mite <i>Unionicola intermedia</i> , Koenike and its relationship to the inflammatory response induced in its molluscan host <i>Anodonta anatina</i> , L.	301
SCHEIN, E., WARNECKE, M. and KIRMSE, P. Development of <i>Theileria parva</i> (Theiler, 1904) in the gut of <i>Rhipicephalus appendiculatus</i> (Neumann, 1901)	309
ABRAHAMSOHN, I. A. and DA SILVA, W. D. Antibody dependent cell-mediated cytotoxicity against <i>Trypanosoma cruzi</i>	317
MASON, P. R. Stimulation of the activity of <i>Schistosoma mansoni</i> miracidia by snail-conditioned water	325
RUPPEL, ANDREAS and CIOLI, DONATO. A comparative analysis of various developmental stages of <i>Schistosoma mansoni</i> with respect to their protein composition	339

PARASITOLOGY

SUBSCRIPTIONS may be sent to any bookseller or subscription agent or direct to Cambridge University Press, P.O. Box 92, London NW1 2DB. Subscriptions in the U.S.A. and Canada should be sent to Cambridge University Press, 32 East 57th Street, New York, N.Y. 10022. The subscription price of volumes 74 and 75, 1977, is £18.00 net (including postage) for a volume of three parts (US \$40.00 in the U.S.A. and Canada) payable in advance (£36.00 or US \$92.00 per year); separate parts cost £7.50 net or US \$21.00 each (plus postage).

BACK VOLUMES. Vols. 1-39: Inquiries should be addressed to Wm Dawson & Sons Ltd, Cannon House, Folkestone, Kent. Vols. 40 onwards: Quotations for parts still in print may be obtained from the London or New York offices of the Cambridge University Press.

FOR PERMISSION to reproduce material from *Parasitology*, please apply to the London or New York office of Cambridge University Press.

ISTI TEAR SERVICE, 325 Chestnut Street, Philadelphia, Pennsylvania 19106, U.S.A. is authorized to supply single copies of separate articles for private use only.

CLAIMS for missing issues can only be considered if made immediately after receipt of the subsequent issue.

ADVERTISING. Details of advertising in *Parasitology* may be obtained from the publisher.

The previous part was published on 13 October 1977

PARASITOLOGY

Volume 75, Part 3, December 1977

CONTENTS

	PAGE
MAY, ROBERT M. Dynamical aspects of host-parasite associations: Crofton's model revisited	259
HENDERSON, D. The effect of worm age, weight and number in the infection on the absorption of glucose by <i>Hymenolepis diminuta</i>	277
GRAY, J. S. The diurnal migration of the fowl cestode, <i>Raillietina cesticillus</i>	285
CANNING, ELIZABETH U. and MADHAVI, R. Studies on two new species of Microsporida hyperparasitic in adult <i>Allocreadium fasciatum</i> (Trematoda, Allocreadiidae)	293
BAKER, R. A. Nutrition of the mite <i>Unionicola intermedia</i> , Koenike and its relationship to the inflammatory response induced in its molluscan host <i>Anodonta anatina</i> , L.	301
SCHEIN, E., WARNECKE, M. and KIRMSE, P. Development of <i>Theileria parva</i> (Theiler, 1904) in the gut of <i>Rhipicephalus appendiculatus</i> (Neumann, 1901)	309
ABRAHAMSON, I. A. and DA SILVA, W. D. Antibody dependent cell-mediated cytotoxicity against <i>Trypanosoma cruzi</i>	317
MASON, P. R. Stimulation of the activity of <i>Schistosoma mansoni</i> miracidia by snail-conditioned water	325
RUPPEL, ANDREAS and CIOSSI, DONATO. A comparative analysis of various developmental stages of <i>Schistosoma mansoni</i> with respect to their protein composition	339

© Cambridge University Press 1977

Bentley House, 200 Euston Road, London NW1 2DB
32 East 57th Street, New York, N.Y. 10022

Printed in Great Britain at the University Press, Cambridge