

PARASITOLOGY

PARASITOLOGY

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

EDITORS

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

EDITORIAL ASSISTANT

SANDRA K. RAY, M.A. Ph.D.

EDITORIAL BOARD

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

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

* representing the British Society for Parasitology

PANEL OF REFEREES

C. ARME	D. A. ERASMUS	M. ELAINE ROSE
J. R. BAKER	D. I. GIBSON	J. H. ROSE
J. BARRETT	L. P. JOYNER	J. F. RYLEY
ELIZABETH U. CANNING	C. R. KENNEDY	G. SALT, F.R.S.
THERESA CLAY	A. M. LACKIE	K. VICKERMAN
R. M. CONNAN	R. J. LINCOLN	P. J. WHITFIELD
R. R. A. COOMBS, F.R.S.	S. H. P. MADRELL	H. H. WILLIAMS
F. E. G. COX	M. C. NESHEIM	C. A. WRIGHT
G. A. M. CROSS	BRIDGET M. OGILVIE	

VOLUME 70, 1975

CAMBRIDGE
AT THE UNIVERSITY PRESS
1975

PUBLISHED BY
THE SYNDICS OF THE UNIVERSITY PRESS
Bentley House, 200 Euston Road, London NW1 2DB
32 East 57th Street, New York, N.Y.10022

© Cambridge University Press, 1975

CONTENTS

(All rights reserved)

PART 1 FEBRUARY 1975

	PAGE
COOP, R. L. and ANGUS, K. W. The effect of continuous doses of <i>Trichostrongylus colubriformis</i> larvae on the intestinal mucosa of sheep and on liver vitamin A concentration	1
LOVE, R. J. <i>Nippostrongylus brasiliensis</i> infections in mice: the immunological basis of worm expulsion	11
WALLIKER, D., CARTER, R. and SANDERSON, A. Genetic studies on <i>Plasmodium chabaudi</i> : recombination between enzyme markers	19
MATTHEWS, BERNARD E. Mechanism of skin penetration by <i>Ancylostoma tubaeforme</i> larvae	25
ARME, C. and WHYTE, A. Amino acids of <i>Diclidophora merlangi</i> (Monogenea)	39
JOYNER, L. P. and NORTON, C. C. Robenidine-dependence in a strain of <i>Eimeria maxima</i>	47
SINDEN, R. E. and CROLL, N. A. Cytology and kinetics of microgametogenesis and fertilization in <i>Plasmodium yoelii nigeriensis</i>	53
MCCLAREN, DIANE J., CLEGG, J. A. and SMITHERS, S. R. Acquisition of host antigens by young <i>Schistosoma mansoni</i> in mice: correlation with failure to bind antibody <i>in vitro</i>	67
VEY, A. and GÖTZ, P. Humoral encapsulation in Diptera (Insecta): comparative studies <i>in vitro</i>	77
KEARN, GRAHAM C. Hatching in the monogenean parasite <i>Dictyocotyle coeliaca</i> from the body cavity of <i>Raja naevus</i>	87
WAGNER, G. G., DUFFUS, W. P. H., AKWABI, C., BURRIDGE, M. J. and LULE, M. The specific immunoglobulin response in cattle to <i>Theileria parva</i> (Muguga) infection	95
MEAD-BRIGGS, A. R., VAUGHAN, J. A. and RENNISON, B. D. Seasonal variation in numbers of the rabbit flea on the wild rabbit	103
LAINSON, R., SHAW, J. J. and LANDAU, I. Some blood parasites of the Brazilian lizards <i>Plica umbra</i> and <i>Uranoscodon superciliosus</i> (Iguanidae)	119
LIM, C. W. The fowl (<i>Gallus domesticus</i>) and a lepidopteran (<i>Setomorpha rutella</i>) as experimental hosts for <i>Tetrameres mohtedai</i> (Nematoda)	143

PART 2 APRIL 1975

	PAGE
PARKIN, J. T. The effect of moisture stress upon the hatching of <i>Nemato-dirus battus</i> larvae	149
PARKIN, J. T. Variations in the water content of the larvae of <i>Nemato-dirus battus</i> during the hatching process	157
BARKER, I. K. Intestinal pathology associated with <i>Trichostrongylus colubriformis</i> infection in sheep: histology	165
BARKER, I. K. Intestinal pathology associated with <i>Trichostrongylus colubriformis</i> infection in sheep: vascular permeability and ultrastructure of the mucosa	173
MOLYNEUX, DAVID and GORDON, ELIZABETH. Studies on immunity with three species of avian trypanosomes	181
NAPPI, A. J. Cellular immune reactions of larvae of <i>Drosophila algonquin</i>	189
KLEI, THOMAS R. and DEGIUSTI, DOMINIC L. Observations on the bionomics of <i>Pseudolynchia canariensis</i> (Diptera: Hippoboscidae)	195
RYLEY, JOHN F. and WILSON, ROBERT G. Laboratory studies with some recent anticoecidials	203
MICHAEL, E. Fine structure and development of schizonts, merozoites and macrogamonts of <i>Eimeria acervulina</i> in the goblet cells of the duodenal epithelium of experimentally infected birds	223
RICHARDS, CHARLES S. Genetic factors in susceptibility of <i>Biomphalaria glabrata</i> for different strains of <i>Schistosoma mansoni</i>	231
KEMP, D. H., KOUDSTAAL, D., ROBERTS, J. A. and KERR, J. D. Feeding of <i>Boophilus microplus</i> larvae on a partially defined medium through thin slices of cattle skin	243
SSENYONGA, G. S. Z. and ADAM, KATHERINE M. G. The number and morphology of trypanosomes in the blood and lymph of rats infected with <i>Trypanosoma brucei</i> and <i>T. congolense</i>	255
ROSE, M. ELAINE. Infections with <i>Eimeria maxima</i> and <i>Eimeria acervulina</i> in the fowl: effect of previous infection with the heterologous organism on oocyst production	263
HEATH, D. D., CHRISTIE, MARION J. and CHEVIS, R. A. F. The lethal effect of mebendazole on secondary <i>Echinococcus granulosus</i> , cysticerci of <i>Taenia pisiformis</i> and tetrathyridia of <i>Mesocestoides corti</i>	273
SCHMIDT, GERALD D. and WHITTAKER, FREDERICK H. Nematode parasites of Puerto Rican tree frogs, <i>Eleutherodactylus</i> spp.: two new species and a proposal of <i>Poekilostrongylus</i> gen.nov. (Trichostrongylidae)	287

PART 3 JUNE 1975

	PAGE
ANDERSON, R. M. and WHITFIELD, P. J. Survival characteristics of the free-living cercarial population of the ectoparasitic digenean <i>Transversotrema patialensis</i> (Soparker, 1924)	295
WHITFIELD, P. J., ANDERSON, R. M. and MOLONEY, N. A. The attachment of cercariae of an ectoparasitic digenean, <i>Transversotrema patialensis</i> , to the fish host: behavioural and ultrastructural aspects	311
HALTON, D. W. Intracellular digestion and cellular defecation in a monogenean, <i>Diclidophora merlangi</i>	331
WASTI, S. S. and HARTMANN, G. C. Experimental parasitization of the gypsy moth, <i>Pophetria dispar</i> (L.), with the entomogenous fungus, <i>Beauveria bassiana</i> (Balsamo) Vuill	341
SHER, A., SMITHERS, S. R. and MACKENZIE, PAMELA. Passive transfer of acquired resistance to <i>Schistosoma mansoni</i> in laboratory mice	347
HO, JU-SHEY. Copepod parasites of deep-sea fish off the Galápagos Islands	359
RYLEY, JOHN F. Lerbek, a synergistic mixture of methyl benzoate and clopidol for the prevention of chicken coccidiosis	377
ROTHERAM, SUSAN and LACKIE, J. M. The ultrastructure of the surface of <i>Diplocystis schneideri</i> Kunstler (Sporozoa: Eugregarinida), a parasite of <i>Periplaneta americana</i>	385
LEE, D. L. Structure and function of the intestinal-cloacal junction of the nematode <i>Heterakis gallinarum</i>	389
WAKELIN, D. Immune expulsion of <i>Trichuris muris</i> from mice during a primary infection: analysis of the components involved	397
FINE, PAUL E. M. Quantitative studies on the transmission of <i>Parahistomonas wenrichi</i> by the ova of <i>Heterakis gallinarum</i>	407

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 1975 subscription price is £12.50 net (including postage) for a volume of three parts (US \$37.50 in the U.S.A. and Canada), payable in advance (£25.00 or US \$75.00 per year); separate parts cost £5.50 net or US \$16.50 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.

ISI 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 16 April 1975

PARASITOLOGY

Volume 70, Part 3, June 1975

CONTENTS

	PAGE
ANDERSON, R. M. and WHITFIELD, P. J. Survival characteristics of the free-living cercarial population of the ectoparasitic digenetic <i>Transversotrema patialensis</i> (Soparker, 1924)	295
WHITFIELD, P. J., ANDERSON, R. M. and MOLONEY, N. A. The attachment of cercariae of an ectoparasitic digenetic, <i>Transversotrema patialensis</i> , to the fish host: behavioural and ultrastructural aspects	311
HALTON, D. W. Intracellular digestion and cellular defecation in a monogenean, <i>Diclidophora merlangi</i>	331
WASTI, S. S. and HARTMANN, G. C. Experimental parasitization of the gypsy moth, <i>Portherzia dispar</i> (L.), with the entomogenous fungus, <i>Beauveria bassiana</i> (Balsamo) Vuill	341
SHER, A., SMITHERS, S. R. and MACKENZIE, PAMELA. Passive transfer of acquired resistance to <i>Schistosoma mansoni</i> in laboratory mice	347
HO, JU-SHEY. Copepod parasites of deep-sea fish off the Galápagos Islands	359
RYLEY, JOHN F. Lerbek, a synergistic mixture of methyl benzoate and clopidol for the prevention of chicken coccidiosis	377
ROTHERAM, SUSAN and LACKIE, J. M. The ultrastructure of the surface of <i>Diplostysis schneideri</i> Kunstler (Sporozoa: Eugregarinida), a parasite of <i>Periplaneta americana</i>	385
LEE, D. L. Structure and function of the intestinal-cloacal junction of the nematode <i>Heterakis gallinarum</i>	389
WAKELIN, D. Immune expulsion of <i>Trichuris muris</i> from mice during a primary infection: analysis of the components involved	397
FINE, PAUL E. M. Quantitative studies on the transmission of <i>Parahistomonas wenrichi</i> by the ova of <i>Heterakis gallinarum</i>	407

© Cambridge University Press 1975

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

Printed in Great Britain at the University Printing House, Cambridge