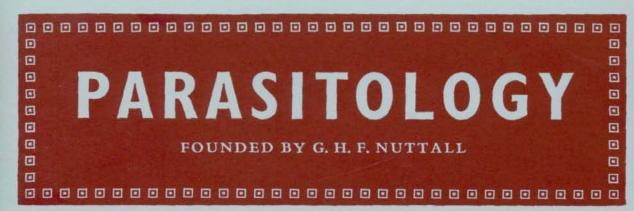
VOLUME 60 PART 2 APRIL 1970





CAMBRIDGE UNIVERSITY PRESS

BENTLEY HOUSE, 200 EUSTON ROAD, LONDON, N.W.1
AMERICAN BRANCH: 32 EAST 57TH STREET, NEW YORK, N.Y. 10022

Subscription per volume: £7 net (\$23.00) (3 parts)

Single parts: £3 net (\$9.50)

PARASITOLOGY

EDITOR

H. D. CROFTON,

Department of Zoology, University of Bristol, Bristol

EDITORIAL BOARD

ANN BISHOP, F.R.S. (Chairman)

D. R. ARTHUR

J. LLEWELLYN

L. G. GOODWIN

GWENDOLEN REES

C. A. HOARE, F.R.S.

P. TATE

President of the British Society for Parasitology ex officio

EDITORIAL PANEL

The Editor is also assisted in the refereeing and editing of papers by the following:

D. L. LEE

G. SALT, F.R.S.

ELSPETH W. McCONNACHIE

G. I. SHARPE

BRIDGET M. OGILVIE

J. SMART

W. P. ROGERS

J. D. SMYTH

PARASITOLOGY publishes original work on parasitology. The scope of the Journal includes papers on morphology; cytology, histochemistry and fine structures; physiology, biochemistry and chemotherapy; and the ecology, life cycle and taxonomy of parasites and their vectors.

PARASITOLOGY is published once every two months. Each volume consists of three parts (published in February, April, June, August, October and December) plus an index. Proceedings of the British Society for Parasitology are published in appropriate issues.

SUBSCRIPTIONS may be sent to any bookseller or subscription agent or direct to Cambridge University Press, P.O. Box 92, London, N.W.1. Subscriptions in the U.S.A. should be sent to Cambridge University Press, 32 East 57th Street, New York, N.Y. 10022. The subscription price is £7 net (including postage) for a volume of three parts (\$23.00 in the U.S.A.), payable in advance; separate parts cost £3 net or \$9.50 each (plus postage).

SECOND CLASS POSTAGE PAID AT NEW YORK, N.Y.

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.

Contributors are strongly urged to study the notes for their guidance printed inside the back cover and to follow the recommendations set out there.

PUBLISHED BY THE SYNDICS OF THE UNIVERSITY PRESS

Bentley House, 200 Euston Road, London, N.W. l American Branch: 32 East 57th Street, New York, N.Y. 10022

Printed in Great Britain at the University Printing House, Cambridge

PARASITOLOGY

PARASITOLOGY

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

EDITOR

H. D. CROFTON

EDITORIAL BOARD

ANN BISHOP, F.R.S. (Chairman)

D. R. ARTHUR
J. LLEWELLYN
L. G. GOODWIN
GWENDOLEN REES
C. A. HOARE, F.R.S.
P. TATE

EDITORIAL PANEL

G. LAPAGE	W. P. ROGERS
D. L. LEE	G. SALT, F.R.S.
ELSPETH W. McCONNACHIE	G. I. SHARPE
BRIDGET M. OGILVIE	J. SMART
J. D. SMYTH	

VOLUME 60, 1970

CAMBRIDGE
AT THE UNIVERSITY PRESS
1970

CONTENTS

(All rights reserved)

Part 1, February 1970

Moss, G. D. The excretory metabolism of the endoparasitic digenean Fasciola hepatica and its relationship to its respiratory metabolism. (With 7 Figures in	PAGE
the Text)	1
Beckett, Evelyn B. and Boothroyd, B. Mode of nutrition of the larvae of the filarial nematode <i>Brugia pahangi</i> . (With 3 Plates)	21
Snow, Keith R. and Arthur, Don R. Larvae of the <i>Ixodes ricinus</i> complex of species. (With 22 Figures in the Text)	27
Lyons, Kathleen M. The fine structure and function of the adult epidermis of two skin parasitic monogeneans, <i>Entobdella soleae</i> and <i>Acanthocotyle elegans</i> . (With 4 Plates and 1 Figure in the Text)	39
Snow, Keith R. The quantity of blood imbibed by <i>Hyalomma anatolicum anatolicum</i> Koch, 1844 (Ixodoidea, Ixodoidea). (With 6 Figures in the Text)	53
LITTLE, JOHN W. The excystment, growth and reproduction of Acanthoparyphium spinulosum Johnston, 1917 (Trematoda) in chicks fed various diets. (With 5 Figures in the Text)	61
Kusel, J. R. Studies on the structure and hatching of the eggs of Schistosoma mansoni. (With 4 Plates and 2 Figures in the Text)	79
Kusel, J. R. The penetration of human epidermal sheets by the cercariae of Schistosoma mansoni and the collection of schistosomula. (With 2 Plates) .	89
Sprent, J. F. A. Studies on ascaridoid nematodes in pythons: the life-history and development of <i>Ophidascaris moreliae</i> in Australian pythons. (With 1 Plate and 16 Figures in the Text).	97
Mapes, C. J. The development of <i>Haemonchus contortus in vitro</i> . II. The effect of disulphide-reducing and sulphydryl-blocking reagents on the rate of development to the fourth-stage larvae. (With 11 Figures in the Text)	123
Rose, M. Elaine. Immunity to coccidiosis: effect of betamethasone treatment of fowls on <i>Eimeria mivati</i> infection. (With 2 Figures in the Text)	137
Long, P. L. and Rose, M. Elaine. Extended schizogony of <i>Eimeria mivati</i> in beta-methasone-treated chickens. (With 1 Plate and 2 Figures in the Text).	147
Part 2, April 1970	
SRIVASTAVA, V. M. L., GHATAK, S. and MURTI, C. R. KRISHNA. Ascaridia galli: lactic acid production, glycogen content, glycolytic enzymes and properties of purified aldolase, enolase and glucose-6-phosphate dehydrogenase. (With 11 Figures in the Text)	157

vi Contents

THREADGOLD, L. T. and READ, C. P. Cell relationships in Hymenolepis diminuta. (With 2 Plates)	181
LUMSDEN, R. D., THREADGOLD, L. T., OAKS, J. A. and ARME, C. On the permeability of cestodes to colloids: an evaluation of the transmembranosis hypothesis. (With 5 Plates and 1 Figure in the Text)	185
REES, GWENDOLEN. Some helminth parasites of fishes of Bermuda and an account of the attachment organ of <i>Alcicornis carangis</i> MacCallum, 1917 (Digenea: Bucephalidae). (With 3 Plates and 16 Figures in the Text).	195
Bruce, R. G. The structure and composition of the capsule of <i>Trichinella spiralis</i> in host muscle. (With 5 Plates)	223
Wakelin, D. Studies on the immunity of albino mice to <i>Trichuris muris</i> . Suppression of immunity by cortisone acetate. (With 1 Figure in the Text)	229
WARREN, E. G. Observations on the life-cycle of <i>Toxocara mackerrasae</i> . (With 15 Figures in the Text)	239
HOPKINS, C. A. Diurnal movement of <i>Hymenolepis diminuta</i> in the rat. (With 7 Figures in the Text)	255
Reissig, Magdalena. Characterization of cell types in the parenchyma of Schistosoma mansoni. (With 7 Plates)	273
HEATH, D. D., SOUTHCOTT, W. H. and MAY, P. F. The use of sheep fistulated at the oesophagus for the recovery of strongyloid larvae from pasture	281
Rose, M. Elaine and Long, P. L. Resistance to <i>Eimeria</i> infection in the chicken: the effects of thymectomy, bursectomy, whole body irradiation and cortisone treatment	291
Kearn, G. C. The production, transfer and assimilation of spermatophores by <i>Entobdella soleae</i> , a monogenean skin parasite of the common sole. (With 1 Plate and 4 Figures in the Text)	301
SCHMIDT, G. D. and Kuntz, R. E. Nematode parasites of Oceanica. VIII. Filariids of birds, with a new genus and four new species. (With 22 Figures in the Text)	313
Part 3, June 1970	
Schlein, Y. A comparative study of the thoracic skeleton and musculature of the Pupipara and the Glossinidae (Diptera) (With 69 Figures in the Text) .	327
Sprent, J. F. A. Studies on ascaridoid nematodes in pythons: the life history and development of <i>Polydelphis anoura</i> in Australian pythons. (With 1 Plate and 35 Figures in the Text).	375
Wilson, R. A. Fine structure of the nervous system and specialized nerve endings in the miracidium of <i>Fasciola hepatica</i> . (With 4 Plates and 2 Figures in the Text)	399
SMITH, K. Electron-microscopical observations on the body wall of the third- stage larva of <i>Haemonchus placei</i> . (With 4 Plates)	411

Contents	vii
Baker, J. R. Transmission of Leucocytozoon sakharoffi in England by Simulium angustitarse. (With 1 Figure in the Text)	417
NUTTING, W. B. and SWEATMAN, G. K. Demodex antechini sp. nov. (Acari, Demodicidae) parasitic on Antechinus stuartii (Marsupialia). (With 2 Plates and 5 Figures in the Text).	425
DASGUPTA, B. and CHATTERJEE, A. An unusual form of fertilization in the malaria parasite of the Himalayan flying squirrel. (With 1 Plate)	431
Long, P. L. Some factors affecting the severity of infection with <i>Eimeria tenella</i> in chicken embryos. (With 3 Figures in the Text)	435
Heath, D. D. The development of <i>Echinococcus granulosus</i> larvae in laboratory animals. (With 1 Plate and 2 Figures in the Text)	449
Wiskin, Maureen. The oncomiracidium and post-oncomiracidial development of the hexabothriid monogenean <i>Rajonchocotyle emarginata</i> . (With 1 Plate and 6 Figures in the Text).	457