

## PARASITOLOGY

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 Cambridge or New York offices of the Cambridge University Press.

COPYING. This journal is registered with the Copyright Clearance Center, 21 Congress Street, Salem, Mass. 01970. Organizations in the USA who are also registered with C.C.C. may therefore copy material (beyond the limits permitted by sections 107 and 108 of US copyright law) subject to payment to C.C.C. of the per-copy fee of \$05.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 0031-1820/85/0080-0001 \$05.00.

ISI TEAR SERVICE, 3501 Market Street, Philadelphia, Pennsylvania 19104, USA, is authorized to supply single copies of separate articles for private use only.

FOR ALL OTHER USE, permission should be sought from the Cambridge or New York offices of the Cambridge University Press.

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.

# PARASITOLOGY

Volume 90, Part 1, February 1985

## CONTENTS

	PAGE
GUZO, D. and STOLTZ, D. B. Obligatory multiparasitism in the tussock moth, <i>Orgyia leucostigma</i>	1
CANNING, ELIZABETH U., BARKER, ROSALIND J., PAGE, A. M. and NICHOLAS, J. P. Transmission of microsporidia, especially <i>Orthosoma operophterae</i> (Canning, 1960) between generations of winter moth <i>Operophtera brumata</i> (L) (Lepidoptera: Geometridae)	11
DE CASTRO, J. J., CUNNINGHAM, M. P., DOLAN, T. T., DRANSFIELD, R. D., NEWSON, R. M. and YOUNG, A. S. Effects on cattle of artificial infestations with the tick <i>Rhipicephalus appendiculatus</i>	21
CORNELISSEN, A. W. C. A. and OVERDULVE, J. P. Sex determination and sex differentiation in coccidia: gametogony and oocyst production after monoclonal infection of cats with free-living and intermediate host stages of <i>Isospora</i> ( <i>Toxoplasma</i> ) <i>gondii</i>	35
HUDSON, A. T., RANDALL, A. W., FRY, M., GINGER, C. D., HILL, B., LATTE, V. S., MCHARDY, N. and WILLIAMS, R. B. Novel anti-malarial hydroxynaphthoquinones with potent broad spectrum anti-protozoal activity	45
SCHLEIN, Y., POLACHEK, I. and YUVAL, B. Mycoses, bacterial infections and antibacterial activity in sandflies (Psychodidae) and their possible role in the transmission of leishmaniasis	57
WALLBANKS, K. R., MAAZOUN, R., CANNING, E. U. and RIOUX, J. A. The identity of <i>Leishmania tarentolae</i> Weynon 1921	67
BARRY, J. D., CROWE, J. S. and VICKERMAN, K. Neutralization of individual variable antigen types in metacyclic populations of <i>Trypanosoma brucei</i> does not prevent their subsequent expression in mice	79
TAIT, A., BARRY, J. D., WINK, R., SANDERSON, A. and CROWE, J. S. Enzyme variation in <i>T. brucei</i> spp. II. Evidence for <i>T.b. rhodesiense</i> being a set of variants of <i>T.b. brucei</i>	89
STURROCK, R. F., COTTRELL, B. J., MAHMOUD, A. A. F., CHEDID, L. and KIMANI, R. Attempts to induce resistance to <i>Schistosoma mansoni</i> and <i>S. haematobium</i> in Kenyan baboons ( <i>Papio anubis</i> ) using non-specific immunostimulants	101
MCMANUS, D. P. and BARRETT, N. J. Isolation, fractionation and partial characterization of the tegumental surface from protoscoleces of the hydatid organism, <i>Echinococcus granulosus</i>	111
WALKER, R. W. and BARRETT, J. Mitochondrial membrane fluorescence and temperature adaptation in <i>Schistocephalus solidus</i> (Cestoda: Pseudophyllidea)	131
CURRAN, J., BAILLIE, D. L. and WEBSTER, J. M. Use of genomic DNA restriction fragment length differences to identify nematode species	137
FRY, M. and BEESLEY, J. E. Cytochemical localization of cytochrome oxidase in tissues of parasitic nematodes	145
ASH, CAROLINE, CROMPTON, D. W. T. and LUNN, P. G. Impact of <i>Nippostrongylus brasiliensis</i> (Nematoda) on the serum albumin and amino acid concentrations of rats fed adequate or protein-deficient diets	157
ONWULIRI, C. O. E. Energy metabolism in the developing larval stages of <i>Ancylostoma tubaeforme</i> and <i>Haemonchus contortus</i> : glycolytic and tricarboxylic acid cycle enzymes	169
WRIGHT, E. J. and SOMMERVILLE, R. I. Structure and development of the spermatozoon of the parasitic nematode, <i>Nematospiroides dubius</i>	179
HALTON, D. W. and McCRAE, J. M. Development of the tegument and alimentary tract in a digenetic trematode, <i>Fellodistomum fellis</i>	193
<i>Trends and Perspectives</i>	
MINCHELLA, D. J. Host life-history variation in response to parasitism	205

© Cambridge University Press 1985

The Pitt Building, Trumpington Street, Cambridge CB2 1RP  
32 East 57th Street, New York, NY 10022, USA  
10 Stamford Road, Oakleigh, Melbourne 3166, Australia

Printed in Great Britain at the University Press, Cambridge