

*A complete study of leeches in three volumes, dealing with every level of their biological organization . . .*

## **Leech Biology and Behaviour**

**Roy T. Sawyer**

The author, who has studied leeches extensively for many years, documents for the first time the scientific and biological rationale underlying the medicinal use of leeches and concludes that there was a nucleus of truth behind their use in previous centuries.

This book gives an authoritative account of leech neurobiology from the biological viewpoint, with emphasis on the neuronal basis and the evolution of leech behaviour.

A key to the leeches of each zoogeographical region of the world and an extensive bibliography (volume 3) are included.

**Volume 1:** 0 19 857377 4, 440 pp., illus. £47.50

**Volume 2:** 0 19 857622 6, 400 pp., illus. £42.50

**Volume 3:** 0 19 857623 4, 288 pp. £25.00

Available separately. Clarendon Press, 1986



**Oxford University Press**

## 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 Cambridge or the American Branch of 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 0031–1820/87/94–01 \$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 Cambridge or the American Branch of 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 94, Part 1, February 1987

## CONTENTS

	PAGE
UGLEM, G. L. Environmental sodium regulates cutaneous sugar transport in a digenean fluke	1
EMSON, R. H. and MLADENOV, P. V. Brittlestar host specificity and apparent host discrimination by the parasitic copepod <i>Ophiopsyllus reductus</i>	7
WINGER, CAROLINE M., CANNING, ELIZABETH U. and CULVERHOUSE, J. D. A monoclonal antibody to <i>Babesia divergens</i> which inhibits merozoite invasion	17
SHAPIRO, S. Z., FUJISAKI, K., MORZARIA, S. P., WEBSTER, P., FUJINAGA, T., SPOONER, P. R. and IRVIN, A. D. A life-cycle stage-specific antigen of <i>Theileria parva</i> recognized by anti-macroschizont monoclonal antibodies	29
MOHAMED, H. A., MOLYNEUX, D. H. and SCOTT, C. M. Isoenzyme characterization of trypanosomes of the subgenus <i>Herpetosoma</i>	39
MOLONEY, N. A., WEBBE, G. and HINCHCLIFFE, P. The induction of species-specific immunity against <i>Schistosoma japonicum</i> by exposure of rats to ultra-violet attenuated cercariae	49
FORD, M. J., TAYLOR, M. G., MCHUGH, S. M., WILSON, R. A. and HUGHES, D. L. Studies on heterologous resistance between <i>Schistosoma mansoni</i> and <i>Fasciola hepatica</i> in inbred rats	55
MCHUGH, S. M., COULSON, PATRICIA S. and WILSON, R. A. Pathologically induced alterations in the dimensions of the hepatic portal vasculature of mice infected with <i>Schistosoma mansoni</i>	69
MCHUGH, S. M., COULSON, PATRICIA S. and WILSON, R. A. The relationship between pathology and resistance to reinfection with <i>Schistosoma mansoni</i> in mice: a causal mechanism of resistance in chronic infections	81
YARLETT, N., ROWLANDS, C. C., YARLETT, NURIZA C., EVANS, J. C. and LLOYD, D. Reduction of niridazole by metronidazole resistant and susceptible strains of <i>Trichomonas vaginalis</i>	93
MCLAREN, DIANE J., ORTEGA-PIERRES, GUADALUPE and PARKHOUSE, R. M. E. <i>Trichinella spiralis</i> : immunocytochemical localization of surface and intracellular antigens using monoclonal antibody probes	101
ADEWUSI, K. and GOVEN, A. J. Effect of anti-thymocyte serum on the eosinophil and lysophospholipase responses in mice infected with <i>Trichinella spiralis</i>	115
PEURA, RAJJA, VALTONEN, E. TELLERVO and CROMPTON, D. W. T. Ovarian development of <i>Corynosoma semerme</i> (Acanthocephala) during experimental infections in rats	123
HIPKISS, JAYNE B., SKINNER, A. and BRANFORD WHITE, C. J. Biochemical and ultrastructural investigation of the effect of Stelazine (trifluoperazine) on <i>Hymenolepis diminuta</i> (Cestoda)	135
JUDSON, D. G., DIXON, J. B. and SKERRITT, G. C. Occurrence and biochemical characteristics of cestode lymphocyte mitogens	151
GEMMELL, M. A., LAWSON, J. R. and ROBERTS, M. G. Population dynamics in echinococcosis and cysticercosis: evaluation of the biological parameters of <i>Taenia hydatigena</i> and <i>T. ovis</i> and comparison with those of <i>Echinococcus granulosus</i>	161
ROBERTS, M. G., LAWSON, J. R. and GEMMELL, M. A. Population dynamics in echinococcosis and cysticercosis: mathematical model of the life-cycles of <i>Taenia hydatigena</i> and <i>T. ovis</i>	181

© Cambridge University Press 1987

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 by the University Press, Cambridge