Bridging gaps between parasitology, pathology, and immunology...

Proceedings of the Fourth International Conference of the World Association for the Advancement of Veterinary Parasitology

To assist in a better understanding of host-parasite relationships, the World Association for the Advancement of Veterinary Parasitology devoted its most recent conference to this research field of interest to both parasitologists and pathologists. The invited papers at the conference were:

The invited papers at the conference were: W. H. R. Lumsden, "Pathobiology of Trypanosomiasis"; J. L. Turk, "Pathology and Immunology of Immediate and Delayed Hypersensitivity";

W. Mulligan, "The Pathophysiology of Helminthic Infections"; E. J. L. Soulsby, "Host Reaction and Nonreaction to Parasitic Organisms."

Altogether, 61 leading research scientists and doctors from 17 countries contributed 41 papers, which are now available as a book edited by Dr. S. M. Gaafar, professor of veterinary parasitology at Purdue and secretary of the association.

408 pages, 84 photographs, 78 graphs, 77 tables, bibliographies, indexes, clothbound, \$15

PURDUE UNIVERSITY STUDIES LAFAYETTE.

Pathology

Parasitic

Diseases

STUDIES SOUTH CAMPUS COURTS — D LAFAYETTE, INDIANA 47907

The Biology of Trematodes

rienatoues

DAVID A. ERASMUS

The trematodes are an important group of parasites and thus their study is of great importance, both academically and also from the economic point of view. Experimental investigation of trematodes is a particularly challenging task, for the establishment of the species in the laboratory must depend on the supply of parasite-free hosts. However, in spite of many difficulties the introduction of methods for the maintenance of species such as *Schistosoma* and *Fasciola*, the application of histochemistry, autoradiography, electron microscopy and *in vitro* culture techniques has enabled considerable progress to be made in our understanding of these parasites over the last two decades. The aim of this text is to introduce final Honours and first year postgraduate students to recent discoveries and ideas developed through the use of modern techniques. All such students will find this book to be immensely stimulating to further study and research.

£6 net approx.

NOTES FOR CONTRIBUTORS

CONTRIBUTIONS will be welcomed from scientists of all nationalities, but must be written in English. Papers should be sent to Dr H. D. Crofton, Department of Zoology, University of Bristol, Woodland Road, Bristol BS8 1UG.

GENERAL. Submission of a paper will be taken to imply that it is unpublished and is not being considered for publication elsewhere. Papers published in *Parasitology* may not be reprinted or published in translation without permission from the Editorial Board. Papers should be as concise as clarity permits, and illustrations kept as few as possible. Attention to the following instructions will assist rapid publication:

TYPESCRIPTS. Papers should be typewritten with double spacing, on one side of quarto paper leaving a margin of about 4 cm. on the left-hand side of each sheet. Sheets should be numbered consecutively. Heavily corrected typescripts may have to be returned to the author for retyping. Papers should state the name of the author and the address to which proofs are to be sent. The address of the laboratory at which the work was carried out will be printed with the author's names at the head of the paper. A short title, not ex-ceeding 44 letters, should be supplied for running headlines.

The general arrangement of the paper should be as follows: Introduction; Methods; Results; Discussion; Summary of results; References. Tables, explanations of text-figures or plates, and keys to the abbreviations used on figures should where necessary be on separate sheets (see below).

SYMBOLS, SIGNS AND ABBREVIATIONS used should be those listed in the booklet Symbols, Signs and Abbreviations recommended for British Scientific Publications (The Royal Society, 1969).

PLATES should only be included where they are absolutely essential. Authors may be required to bear part of the cost if an unduly large number is required. Photographs should be sharp glossy prints, trimmed and mounted on white card and grouped and numbered as they are required to appear in print (oversea contributors may prefer to submit unmounted prints with a sketch to indicate the proposed grouping). The area of a group cannot exceed 20 by 12.5 cm., after reduction (if any). Lettering is best indicated on an overlay or separate sketch.

TEXT FIGURES should not be more than about twice the size of the finished block, and the thickness of lines and size of points, stipples, etc. determined accordingly. The maximum size of any one group of figures, after reduction, is 20 by 12.5 cm. They must be drawn in Indian ink on white Bristol Board, heavy drawing paper or trac-ing paper; graph paper ruled in pale blue (but not other colours) is also acceptable. Explanatory lettering should be lightly inserted in blue pencil, with tally lines showing the position of the feature to which it refers, so that the printer may put in the finished lettering. Lettering should be limited to features essential to the understanding of the drawing or photograph, and abbreviations should be avoided wherever possible so that the details can be readily understood without reference to an explanatory key. Properly prepared scraperboard drawings may be suitable for reproduction as line drawings, but drawings with graduations of shading (e.g. washdrawings) are not. Please try to avoid creasing or folding illustrations. Legends to illusside the illustrations. Each illustration must have the name of the author and figure number pencilled on the back. Plates and diagrams should be numbered separately and their approximate positions indicated in the margin of the typescript. It is very convenient if photographs of illustrations are sent with the papers in addition to the original figures; they are essential when the originals are very large, so that they may be sent through the post to referees.

TABLES should be kept to a minimum and the duplication of information in tables and graphs, avoided. They should be typed on separate sheets of paper and their approximate positions indicated in the margin of the typescript. Each table should be numbered and be designed to be printed in the normal orientation of the text with the data so grouped as to make the use of rules unnecessary, whenever possible.

NOMENCLATURE. Authors should follow the International Rules of Nomenclature in the names of organisms. When new names are introduced the recommendations of the International Code of Zoological Nomenclature, 1964, should be strictly adhered to, especially with regard to the designation of types and statements as to where such types are deposited.

REFERENCES should be given only when cited in the text and should be listed in alphabetical order at the end of the paper, in the following form

Surname of author(s), initials; year of publica-tion; title of paper; title of journal *in full*; volume number; first and last page numbers of the work cited. When books are listed, the title of the book should be underlined and it should be followed by the town of publication and the name of the publisher.

Where there is more than one reference to a particular author or group of authors with the same date, references should be distinguished by letters placed after the date, the letter *a* being used for the first reference cited and so on.

PROOFS sent to authors are already in page form and only essential corrections should be made on them. Excessive alterations, other than corrections of printers' errors, may be disallowed or charged to the author; they are in any case liable to delay pub-lication. Correction should be made using the symbols in British Standard 1219: 1958, or its shortened version B.S. 1219C: 1958 (British Standards Institution, 2 Park Street, London, W.1). After correction, the printers' marked proof should be returned to the Editor.

OFFPRINTS. Twenty-five offprints of each paper are provided free of charge. Additional offprints may be ordered on the form sent out with proofs, provided this is returned within seven days of receipt.

MORE DETAILED INFORMATION on the preparation of manuscripts for publication is to be found in the following:

- NUTTALL, G. H. F. (1940). Notes on the Preparation of papers for Publication in the Journal of Hygiene and in Parasitology, Parasitology 32, 1-62 and J. Hyg., Camb. 40, 1-62. (Now out of print and also out of date in some respects.) The Journal of Physiology (1966). Suggestions to Authors 182, 1-33, Cambridge University Press.
- (e.g. washdrawings) are not. Please try to avoid creasing or folding illustrations. Legends to illus-trations must be given on a separate sheet of paper, but scales of magnification should be given along-https://doi.org/10.1017/S0031182000079488 Published online by Cambridge University Press

PARASITOLOGY

Volume 63, Part 2, October 1971

CONTENTS

| | PAGE |
|---|------|
| IKEME, M. M. Observations on the pathogenicity and pathology of Ascaridia galli. (With 1 Plate) | 169 |
| LYONS, KATHLEEN, M. Comparative electron microscope studies on the epidermis of the blood living juvenile and gill living adult stages of <i>Amphibdella flavolineata</i> (Monogenea) from the electric ray <i>Torpedo nobiliana</i> . (With 4 Plates and 1 Figure in the Text) | 181 |
| DIXON, J. B. A positive correlation between population size and egg-content in Meta- strongylus apri (Gmelin, 1790). (With 3 Figures in the Text) | 191 |
| STOFFOLANO, J. G. JR. and STREAMS, F. A. Host reactions of Musca domestica, Orthellia caesarion, and Ravinia l'herminieri to the nematode Heterotylenchus autumnalis. (With 5 Plates) | 195 |
| HARRY, O. G. Studies on infection and reinfection by eugregarines. (With 2 Plates and 3 Figures in the Text) | 213 |
| WILSON, R. A. Gland cells and secretions in the miracidium of <i>Fasciola hepatica</i> . (With 4 Plates and 1 Figure in the Text) | 225 |
| IKEME, M. M. Effects of different levels of nutrition and continuing dosing of poultry with Ascaridia galli eggs on the subsequent development of parasite populations. | 233 |
| IKEME, M. M. Weight changes in chickens placed on different levels of nutrition and varying degrees of repeated dosage with <i>Ascaridia galli</i> eggs. (With 4 Figures in the Text) | 251 |
| EWERS, W. H. <i>Eperythrozoon mariboi</i> sp.nov., (Protophyta: Order Rickettsiales) a parasite of red blood cells of the flying fox <i>Pteropus macrotis epularius</i> in New Guinea. (With 1 Plate and 2 Figures in the Text) | 261 |
| LEE, D. L. Changes in adult <i>Nippostrongylus brasiliensis</i> during the development of im- munity to this nematode in rats. 2. Total lipids and neutral lipids | 271 |
| LETHBRIDGE, R. C. The chemical composition and some properties of the egg layers in Hymenolepis diminuta eggs. (With 3 Figures in the Text) | 275 |
| OGBOURNE, C. P. Variations in the fecundity of strongylid worms of the horse. (With 5 Figures in the Text) | 289 |
| ROSE, M. ELAINE and LONG, P. L. Immunity to coccidiosis: protective effects of trans- ferred serum and cells investigated in chick embryos infected with <i>Eimeria tenella</i> . (With 2 Plates) | 299 |
| PHILLIPS, R. S. Antigenic variation in <i>Babesia rodhaini</i> demonstrated by immunization with irradiated parasites. (With 4 Figures in the Text) | 315 |
| KEMP, D. H., KOUDSTAAL, D. and KERR, J. D. Labelling larvae of the cattle-tick <i>Boophilus</i> microplus, with ³² P to follow their movements on the host. (With 2 Figures in the Text) | 323 |
| SCHLEIN, Y. and THEODOR, O. On the genitalia of the Pupipara and their homologies with those of <i>Calliphora</i> and <i>Glossina</i> . (With 28 Figures in the Text) | 331 |
| | |

© Cambridge University Press, 1971

Printed in Great Britain at the University Printing House, Cambridge