FETTER LAME

# PARASITOLOGY

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

EDITED BY

D. KEILIN, Sc.D., F.R.S.
AND
E. HINDLE, Ph.D., Sc.D.



### LONDON

### CAMBRIDGE UNIVERSITY PRESS FETTER LANE, E.C. 4

CHICAGO: The University of Chicago Press (Agents for the United States)

BOMBAY, CALCUTTA, MADRAS: Macmillan

Tokyo: Maruzen Company, Ltd.

All rights reserved

Eighteen Shillings and Sixpence net

Issued 23 June, 1934

PRINTED IN GREAT BRITAIN

# Cambridge University Press

#### TICKS. A MONOGRAPH OF THE IXODOIDEA

By G. H. F. NUTTALL, F.R.S., C. WARBURTON, and L. E. ROBINSON

### Part IV. The Genus Amblyomma

By L. E. Robinson, Ph.D. (CANTAB.). With a frontispiece, 7 plates (2 in colours), and 130 figures, 116 being original Royal 8vo. 20s. net

#### THE TRANSMUTATION OF BACTERIA

By S. GURNEY-DIXON, M.A., M.D., M.R.C.S., L.R.C.P.

Demy 800. 12s. net

#### INSECT PESTS AND FUNGUS DISEASES OF FRUIT AND HOPS

A complete manual for growers. By Percival J. Fryer, F.I.C., F.C.s. With 24 plates (20 in colour and 4 in black and white) and 305 original photographs and diagrams

Crown 8vo. 45s. net

#### FUNGOID AND INSECT PESTS OF THE FARM

By F. R. Petherbridge, M.A., Biological Adviser, School of Agriculture, Cambridge. Second Edition. With 54 illustrations

\*\*Large crown 8vo. 6s. net\*\*

(CAMBRIDGE FARM INSTITUTE SERIES)

#### BRITISH RUST FUNGI (UREDINALES)

Edited by E. O. JORDAN and I. S. FALK.

Their Biology and Classification. By W. B. GROVE, M.A. With 290 figures

Demy 8vo. 21s. net

CAMBRIDGE UNIVERSITY PRESS, FETTER LANE, LONDON, E.C. 4

## The University of Chicago Press

### THE NEWER KNOWLEDGE OF BACTERIOLOGY AND IMMUNOLOGY.

A collection of late researches in the field of bacteriology prepared by eighty leading research men in the field.

FOOD POISONING AND FOOD-BORNE INFECTION. (Revised edition, 1931.)
By Edwin O. Jordan.

11s. 6d. net

A clear summary of our present knowledge of poisoning through foods.

### RHUS DERMATITIS: ITS PATHOLOGY AND CHEMOTHERAPY. By TAMES B. McNair. 18s. net

Cause, effect, and remedy for ivy poisoning discussed from the standpoints of botany, chemistry and pharmacology.

#### SELECTIVE FERTILIZATION. By DONALD F. JONES.

9s. net

458. net

A splendid study of the factors operating in the plant and animal world to influence the exercise of choice in mate selection.

LABORATORY OUTLINES IN BACTERIOLOGY AND IMMUNOLOGY. By JOHN F. NORTON and I. S. FALK. 7s. 6d. net

THE EPIDEMIOLOGY AND CONTROL OF MALARIA IN PALESTINE. By
1. J. KLIGLER. 22s. 6d. net

Agents in Great Britain and the British Empire (except Canada)

CAMBRIDGE UNIVERSITY PRESS, FETTER LANE, LONDON, E.C. 4

## **PARASITOLOGY**

# **PARASITOLOGY**

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

EDITED BY

D. KEILIN, Sc.D., F.R.S.

AND

E. HINDLE, Ph.D., Sc.D.

**VOLUME XXVI 1934** 

Reprinted 1966 for Wm. DAWSON & SONS LTD., LONDON with the permission of the Proprietors

ORIGINALLY PRINTED IN GREAT BRITAIN BY THE CAMBRIDGE UNIVERSITY PRESS. REPRINTED IN THE NETHERLANDS BY KRIPS/OOSTHOEK, MEPPEL AND UTRECHT

### CONTENTS

### No. 1 (April)

FISH, FREDERIC F. A Fungus Disease in Fishes of the Gulf of Maine.  (With Plate I, containing Figs. 1-5, and Figs. I and II in the Text)	PAGE
BISHOP, ANN. Observations upon <i>Embadomonas intestinalis</i> in Culture. (With Plate II)	17
BISHOP, ANN. The Experimental Infection of Amphibia with Cultures of Trichomonas	26
Setna, S. B. and Bhatia, B. L. On some Gregarines from the Prawn, Parapeneopsis sculptilis (Heller). (With 23 Figures in the Text)	34
BOXHALL, G. N., HAPPOLD, F. C. and LLOYD, LL. Quinanil as a Bactericidal Agent in the Isolation of an Insect Flagellate .	44
Sharif, M. Historical Review and Relationship of the Genera of the Family Ixodidae. (With 3 Figures in the Text)	49
MacGill, Elsie I. On the Biology of Anagrus atomus (L.) Hal.: an Egg Parasite of the Leaf-Hopper Erythroneura pallidifrons Edwards. (With 11 Figures in the Text)	57
Jobling, B. A Revision of the Genus Nycteribosca Speiser (Diptera Pupipara, Streblidae). (With 16 Figures in the Text)	64
Jobling, B. A New Species of the Genus <i>Nycteribosca</i> (Diptera Pupipara, Streblidae). (With 1 Figure in the Text)	98
ROTHSCHILD, MIRIAM. Three New Species of Fleas from Dutch New Guinea. (With 11 Figures in the Text)	100
ELTON, CHARLES. Metazoan Parasites from Mice in the Isle of Lewis, Outer Hebrides	107
Leigh-Sharpe, W. Harold. A Third List of Parasitic Copepoda of Plymouth with Notes. (With 2 Figures in the Text)	112
Chrenko, Frank A. A List of Parasitic Rhabdocoela (Turbellaria) of Plymouth. (With 2 Figures in the Text)	114
Canavan, Wm. P. N. On a Trematode Allopyge undulatus n.sp. Parasitic in Lilford's Crane (Megalornis grus lilfordi). (With 1 Figure in the Text)	117
HICKMAN, V. V. On Coitocaecum anaspidis sp.nov., a Trematode exhibiting Progenesis in the Fresh-water Crustacean Anaspides tasmaniae Thomson. (With 6 Figures in the Text)	121
BAYLIS, H. A. Some Parasitic Worms from Australia. (With 3 Figures in the Text)	129
DAVIES, EVAN. On the Anatomy of the Trematode Petasiger exacretus Dietz 1909, from the Intestine of Phalacrocorax carbo. (With 2 Figures in the Text)	133

No. 1 (April) continued	
McIntosh, Allen and Chitwood, B. G. A New Nematode, Longibucca lasiura n.sp. (Rhabditoidea, Cylindrogasteridae), from a Bat. (With 5 Figures in the Text)	PAGE
Woodland, W. N. F. On the Amphilaphorchidinae, a New Subfamily of Proteocephalid Cestodes, and <i>Myzophorus admonticellia</i> , gen. et sp.n., Parasitic in <i>Pirinampus</i> spp. from the Amazon. (With Plate III, containing Figs. 1–14, and Fig. I in the Text)	141
METTAM, R. W. M. Turning Sickness and East Coast Fever, pre- liminary communication. (With Plate IV)	150
Notice: A Central Malaria Library	152
No. 2 (June)	
Duke, H. Lyndhurst. On the Transmissibility by Glossina of Try- panosoma brucei, T. rhodesiense and T. gambiense, with Special Reference to Old Laboratory Strains.	153
Wichterman, Ralph. A New Protozoan Parasite, Nyctotherus cheni n.sp. (Ciliata), from Chinese Frogs. (With 2 Figures in the Text)	163
Kirtisinghe, P. Gloiopotes watsoni n.sp. and Lernaeenicus seeri n.sp., Parasitic Copepods of Fish from Ceylon. (With 21 Figures in the Text)	167
Graham-Smith, G. S. The Alimentary Canal of Calliphora erythrocephala L., with Special Reference to its Musculature and to the Proventriculus, Rectal Valve and Rectal Papillae. (With Plates V-IX, and 24 Text-figures)	176
PROUTY, MARGARET Jo and COATNEY, G. ROBERT. Further Studies on the Biology of the Pigeon Fly, <i>Pseudolynchia maura</i> Bigot (Diptera Hippoboscidae)	249
Brooks, G. L. Some New Ectoparasitic Trematodes (Onchocotylinae) from the Gills of American Sharks. (With 8 Figures in the Text)	259
WOODLAND, W. N. F. On some Remarkable New Cestodes from the Amazon Siluroid Fish, <i>Brachyplatystoma filamentosum</i> (Lichtenstein). (With Plate X, containing Figs. 1-14, and Fig. I in the Text)	268
Sandground, J. H. Nematostrigea serpens (nom.nov.): a Redescription of Holostomum serpens Nitzsch 1819. (With Plate XI)	278
MacLeod, J. Ixodes ricinus in Relation to its Physical Environment: the Influence of Climate on Development. (With 6 Figures in the Text)	282
HARVEY, W. HENWOOD. A Case of Myiasis, due to Calliphora erythrocephala, occurring in Man	306

f uugus $f T$ )

· · · · · · · · · · · · · · · · · · ·
ASCHNER, MANFRED. Studies on the Symbiosis of the Body Louse.  I. Elimination of the Symbionts by Centrifugalisation of the Eggs. (With Plate XII)
DUKE, H. LYNDHURST. On the Employment of Volunteers in Try- panosomiasis Research; and on the Element of Control in Ex- periments with Trypanosomes and Glossinae
Lal, K. B. Insect Parasites of Psyllidae. (With 4 Figures in the Text)
CRAM, E. B. and Wehr, E. E. The Status of Species of <i>Trichostrongylus</i> of Birds. (With 13 Figures in the Text)
CRAM, ELOISE B. and CUVILLIER, EUGENIA. Observations on Trichostrongylus tenuis Infestation in Domestic and Game Birds in the United States
Robinson, V. C. A New Species of Accacoeliid Trematode (Accacolium alveolatum n.sp.) from the Intestine of a Sun-fish (Orthagoriscus mola Bloch). (With Plate XIII)
CHANDLER, ASA C. A Revision of the Genus Rhadinorhynchus (Acanthocephala) with descriptions of New Genera and Species. (With Plate XIV)
Taylor, E. L. Fimbriaria fasciolaris in the Proventriculus of a Swan associated with Bacterial Infection and Ulcer Formation
Hora, A. M. Notes on Mites collected from the Isle of Lewis, Outer Hebrides
Evans, A. C. Studies on the Influence of the Environment on the Sheep Blow-fly <i>Lucilia sericata</i> Meig. I. The Influence of Humidity and Temperature on the Egg. (With 8 Figures in the Text)
Thompson, W. R. The Tachinid Parasites of Woodlice. (With Plates XV-XXII, containing Figs. 1-79, and Figs. I-V in the Text)
THOMPSON, W. R. The Development of a Colony of Aphelinus mali Hald. (With 1 Figure in the Text)
No. 4 (October)
FAUST, ERNEST CARROLL and TANG, CHUNG-CHANG. A New Species of Syngamus (S. auris) from the Middle Ear of the Cat in Foochow, China. (With 9 Figures in the Text).
CAWSTON, F. G. Evidence of the Successful Destruction of Schistosomes
McIntosh, Allen. A New Blood Trematode, Paradeontacylix sanguinicoloides n.g., n.sp., from Seriola lalandi with a Key to the Species of the Family Aporocotylidae. (With 1 Figure in the Text)

### No. 4 (October) continued

	DAGE
DOBROVOLNY, C. G. and ACKERT, J. E. The Life History of Leidynema appendiculata (Leidy), a Nematode of Cockroaches. (With Plate XXIII and 10 Text-figures)	PAGE 468
Robinson, V. C. On a Collection of Parasitic Worms from Malay. I. Nematodes (Superfamilies Ascaroidea and Oxyuroidea). (With Plates XXIV–XXVI, containing Figs. 1–26)	481
BODENHEIMER, F. S. Ecological Studies on Some Ticks. (With 3 Figures in the Text)	489
Daubney, R. and Hudson, J. R. Nairobi Sheep Disease: Natural and Experimental Transmission by Ticks other than Rhipicephalus appendiculatus. (With 3 Charts in the Text)	496
YAKIMOFF, W. L. Two New Species of Coccidia: Eimeria triffitt n.sp. of the Eland (Orias canna), and Eimeria peruviana n.sp. of the Llama (Lama glama). (With 3 Figures in the Text).	510
Tate, P. and Vincent, M. The Susceptibility of Autogenous and Anautogenous Races of Culex pipiens to Infection with Avian Malaria (Plasmodium relictum)	512
TATE, P. and VINCENT, M. The Action of Atebrin on Bird Malaria	523
Dobell, Clifford. Researches on the Intestinal Protozoa of Monkeys and Man. VI. Experiments with the Trichomonads of Man and the Macaques	531
BISHOP, Ann. The Intestinal Protozoa of a Muskrat, Fiber (=Ondatra) zibethica, with a Note upon Retortamonas sp. from the Guineapig. (With 7 Figures in the Text)	578
OTTER, G. W. On the Early Stages of Lestodiplosis alvei Barnes (Diptera, Cecidomyidae), especially in Relation to the Larval Head Capsule. (With 15 Figures in the Text)	582
BARNES, H. F. Lestodiplosis alvei sp.n. (Diptera, Cecidomyidae)	594
INDEX OF AUTHORS	597
INDEX OF SUPERCORS	601