

# PARASITOLOGY

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

EDITED BY

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

IN CONJUNCTION WITH

H. A. BAYLIS, M.A., D.Sc.

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

F. J. BROWN, M.Sc.

C. A. HOARE, D.Sc.

P. A. BUXTON, M.A., M.R.C.S.

K. M. SMITH, Ph.D., F.R.S.

C. DOBELL, F.R.S.

P. TATE, M.Sc., Ph.D.

W. R. THOMPSON, F.R.S.



CAMBRIDGE UNIVERSITY PRESS

LONDON: BENTLEY HOUSE

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 4 September 1941*

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 8vo. 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. 10s. 6d. 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)**

Their Biology and Classification. By W. B. GROVE, M.A. With 290 figures *Demy 8vo. 21s. net*

---

---

Cambridge University Press, Bentley House, 200 Euston Road, N.W. 1

# PARASITOLOGY

**CAMBRIDGE UNIVERSITY PRESS**  
**LONDON: BENTLEY HOUSE**



**CHICAGO: THE UNIVERSITY OF CHICAGO PRESS**  
(Agents for the United States)

**BOMBAY, CALCUTTA, MADRAS: MACMILLAN**

*All rights reserved*

# PARASITOLOGY

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

EDITED BY

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

IN CONJUNCTION WITH

H. A. BAYLIS, M.A., D.Sc.

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

F. J. BROWN, M.Sc.

C. A. HOARE, D.Sc.

P. A. BUXTON, M.A., M.R.C.S.

K. M. SMITH, Ph.D., F.R.S.

C. DOBELL, F.R.S.

P. TATE, M.Sc., Ph.D.

W. R. THOMPSON, F.R.S.

VOLUME 33, 1941

CAMBRIDGE  
AT THE UNIVERSITY PRESS

1941

CAMBRIDGE  
UNIVERSITY  
PRESS  
LIBRARY  
LONDON

# C O N T E N T S

## No. 1 (MARCH)

	PAGE
DOBELL, CLIFFORD. Michał Siedlecki (1873-1940). A founder of modern knowledge of the Sporozoa. (With Plate I) . . . . .	1
CAMERON, EWEN. The biology and post-embryonic development of <i>Opius ilicis</i> n.sp., a parasite of the holly leaf-miner ( <i>Phytomyza ilicis</i> Curt.). (With Plate II and 8 Figures in the Text) . . . . .	8
HADDOW, A. J. The influence of nutrition on egg-production and longevity in unmated female body-lice ( <i>Pediculus humanus corporis</i> : Anoplura). (With 1 Figure in the Text) . . . . .	40
VARLEY, G. C. On the search for hosts and the egg distribution of some chalcid parasites of the knapweed gall-fly. (With 3 Figures in the Text) . . . . .	47
WIGGLESWORTH, V. B. The sensory physiology of the human louse <i>Pediculus humanus corporis</i> de Geer (Anoplura). (With 35 Figures in the Text) . . . . .	67
SMITH, KENNETH M. Some notes on the relationship of plant viruses with vector and non-vector insects. (With Plates III and IV) . . . . .	110
BUXTON, P. A. On the occurrence of the crab-louse ( <i>Phthirus pubis</i> : Anoplura) in the hair of the head . . . . .	117
CLAY, THERESA. A new genus and species of Mallophaga. (With 7 Figures in the Text) . . . . .	119

## No. 2 (MAY)

THORPE, W. H. A description of six new species of the genus <i>Cryptochaetum</i> (Diptera-Agromyzidae) from East Africa and East Indies; together with a key to the adults and larvae of all known species. (With 30 Figures in the Text) . . . . .	131
THORPE, W. H. The biology of <i>Cryptochaetum</i> (Diptera) and <i>Eupelmus</i> (Hymenoptera) parasites of <i>Aspidoproctus</i> (Coccidae) in East Africa. (With 26 Figures in the Text) . . . . .	149
FERRIÈRE, CH. A new coccid-parasite of the family Eupelmidae (Hym. Chalc.) . . . . .	169
DEOBAS, P. J. Structure of <i>Hemimerus deceptus</i> Rehn. var. <i>ovatus</i> ; an external parasite of <i>Cricetomys gambiense</i> . (With 29 Figures in the Text) . . . . .	172

	PAGE
FANTHAM, H. B., PORTER, ANNIE and RICHARDSON, L. R. Some microsporidia found in certain fishes and insects in eastern Canada. (With Plate V, containing Figs. 1-74, and 1 Figure in the Text) . . . . .	186
CROFTON, H. DRAPER. A record of trematode parasites from <i>Mola mola</i> and <i>Raniceps raninus</i> (Linn.) . . . . .	209
MACLEOD, J. and CRAUFURD-BENSON, H. J. Casual beds as a source of louse infestation . . . . .	211
PANIKKAR, N. KESAVA and SPROSTON, NORA G. Osmotic relations of some metazoan parasites . . . . .	214
BUXTON, P. A. Studies on populations of head-lice ( <i>Pediculus humanus capitis</i> : Anoplura). IV. The compositions of populations. (With 4 Figures in the Text) . . . . .	224
LEESON, H. S. The effect of temperature upon the hatching of the eggs of <i>Pediculus humanus corporis</i> de Geer (Anoplura). (With 1 Figure in the Text) . . . . .	243

### No. 3 (AUGUST)

LEWIS, E. ANEURIN and FOTHERINGHAM, W. The transmission of <i>Theileria parva</i> by ticks. (With 19 Figures in the Text) . . . . .	251
MACLEOD, J. and CRAUFURD-BENSON, H. J. Observations on natural populations of the body louse, <i>Pediculus humanus corporis</i> de G. (With 6 Figures in the Text) . . . . .	278
DAWES, BEN. On <i>Multicotyle purvisi</i> , n.g., n.sp., an aspidogastrid trematode from the river turtle, <i>Seibenrockiella crassicollis</i> , in Malaya. (With 1 Figure in the Text) . . . . .	300
RADFORD, CHARLES D. Notes on some new species of parasitic mites. Part 4. (With 8 Figures in the Text) . . . . .	306
BINGHAM, MYRA L. A note on the bionomics of <i>Ixodes ricinus</i> L. . . . .	316
SMITH, KENNETH M. and MACCLEMENT, W. D. Further studies on the ultra-filtration of plant viruses. (With 5 Figures in the Text) . . . . .	320
CRAUFURD-BENSON, H. J. The cattle lice of Great Britain. Part I. Biology, with special reference to <i>Haematopinus eurysternus</i> . (With 1 Figure in the Text) . . . . .	331

	PAGE
CRAUFURD-BENSON, H. J. The cattle lice of Great Britain. Part II. Lice populations. (With 4 Figures in the Text) . . . . .	343
ROTHSCHILD, MIRIAM and SPROSTON, NORA G. The metacercaria of <i>Cercaria doricha</i> Roths. 1934, or a closely related species. (With 2 Figures in the Text) . . . . .	359

NO. 4 (DECEMBER)

JORDAN, KARL. On four eight-combed Chinese bat-fleas of the genus <i>Ischnopsyllus</i> in the collection of the British Museum (Natural History). (With 18 Figures in the Text) . . . . .	363
REES, GWENDOLEN. The musculature and nervous system of the plerocercoid larva of <i>Dibothriorhynchus grossum</i> (Rud.). (With 35 Figures in the Text) . . . . .	373
REES, GWENDOLEN and LLEWELLYN, JACK. A record of the trema- tode and cestode parasites of fishes from the Porcupine Bank, Irish Atlantic Slope and Irish Sea . . . . .	390
LLEWELLYN, J. A description of the anatomy of the monogenetic trematode <i>Choricotyle chrysophryi</i> van Beneden & Hesse. (With 7 Figures in the Text) . . . . .	397
ROTHSCHILD, MIRIAM. Observations on the growth and trematode infections of <i>Peringia ulvae</i> (Pennant) 1777 in a pool in the Tamar saltings, Plymouth. (With 3 Figures in the Text) . . . . .	406
LLEWELLYN, J. A revision of the monogenean family Diclido- phoridae Fuhrmann, 1928. (With 18 Figures in the Text) . . . . .	416
LLEWELLYN, J. The taxonomy of the monogenetic trematode <i>Plectanocotyle gurnardi</i> (v. Ben. & Hesse). (With 1 Figure in the Text) . . . . .	431
REES, GWENDOLEN. The scolex of <i>Aporhynchus norvegicus</i> (Olss.). (With 8 Figures in the Text) . . . . .	433
ROTHSCHILD, MIRIAM. The metacercaria of a pleurolophocerca cercaria parasitizing <i>Peringia ulvae</i> (Pennant, 1777). (With 4 Figures in the Text) . . . . .	439
DAWES, BEN. On <i>Styphlodora elegans</i> n.sp. and <i>Styphlodora com- pactum</i> n.sp. trematode parasites of <i>Python reticulatus</i> in Malaya, with a key to the species of the genus <i>Styphlodora</i> Looss, 1899. (With 3 Figures in the Text) . . . . .	445