

Vol. 47, Nos. 3, 4

December 1957

PARASITOLOGY

(Founded by G. H. F. Nuttall)

EDITED BY

D. KEILIN and P. TATE

IN CONJUNCTION WITH

A. BISHOP

F. J. BROWN

E. HINDLE

C. A. HOARE

G. LAPAGE

K. M. SMITH



CAMBRIDGE UNIVERSITY PRESS

BENTLEY HOUSE, 200 EUSTON ROAD, LONDON, N.W.1

AMERICAN BRANCH: 32 EAST 57TH STREET, NEW YORK 22, N.Y.

Fifty-five Shillings net

(U.S.A. \$9.50)

Issued 29 January 1958

CAMBRIDGE
UNIVERSITY
PRESS
LIBRARY

A list of the

JOURNALS

*Published by the
Cambridge University
Press, may be had
from*

THE MANAGER
CAMBRIDGE UNIVERSITY PRESS
BENTLEY HOUSE
200 EUSTON ROAD
LONDON, N.W. 1

MICHROME STAINS

and Reagents

for Microscopy & Biology

Adonitol	Giemsa Stain	Pyronin
Bromcresol Green	Janus Green, B	Sodium Desoxy-
Carminic Acid	Laemoid	cholate
Cedarwood Oil	Leishman Stain	Sudan Black
Celloidin	Luxol Fast Blue	Toluidine Blue
Chlorazol Black	Methyl Green	Urease
Gallocyanin	Nile Blue	Wright Stain, &c.

AQUAMOUNT: a moderately quick-drying aqueous colourless, neutral mountant.

OPTOIL: synthetic, non-sticky immersion oil.

CRISTALITE & CLEARMOUNT: synthetic, colourless, neutral mountants.

EDWARD GURR, LTD.

42 Upper Richmond Road West
LONDON, S.W.14

Telephones: PROspect 8051 and 7606

Service, uniform high quality, reliability, and immediate delivery

Ready early 1958: "Methods of Analytical Histology & Histochemistry", by Edward Gurr, about 475 pages, Royal 8vo, price about 70/-.

Now ready:

"A Practical Manual of Medical & Biological Staining Techniques", 460 pages, 42/-, Postage 1/6, by E. GURR.

Publications issued by

COMMONWEALTH INSTITUTE OF ENTOMOLOGY

56 Queen's Gate, London, S.W. 7

BULLETIN OF ENTOMOLOGICAL RESEARCH

Published quarterly and containing original articles on Economic Entomology. *Issued Post Free.*
Annual Subscription (payable in advance) 100s. od.
Prices of back parts and volumes on application.

REVIEW OF APPLIED ENTOMOLOGY

Consisting of abstracts or reviews of current literature on Economic Entomology throughout the world. Published monthly in two series:

Series "A" dealing with insect and other Arthropod pests of cultivated plants, forest trees and stored products of animal and vegetable origin.

Series "B" dealing with insects, ticks, etc. conveying disease or otherwise injurious to man and animals. *Issued Post Free.*

Series "A" Series "B"

Annual Subscription (payable in advance) 60s. od. 30s. od.
Prices of back parts and volumes on application.

ZOOLOGICAL RECORD, part INSECTA

Published annually about October each year and containing as complete a record as possible of the literature of the previous year, chiefly from the systematic standpoint.

Annual Subscription (including postage) 51s. od.
Prices of back volumes on application.

PARASITOLOGY

PARASITOLOGY

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

EDITED BY

D. KEILIN and P. TATE

IN CONJUNCTION WITH

A. BISHOP

C. A. HOARE

F. J. BROWN

G. LAPAGE

E. HINDLE

K. M. SMITH

VOLUME 47, 1957

CAMBRIDGE

AT THE UNIVERSITY PRESS

1957

*Printed in Great Britain at the University Press, Cambridge
(Brooke Crutchley, University Printer)
and published by the Cambridge University Press
Bentley House, 200 Euston Road, London, N.W. 1
American Branch: 32 East 57th Street, New York 22, N.Y.
Agent in Canada: The Macmillan Company of Canada Limited*

CONTENTS

Nos. 1, 2 (JUNE 1957)

	PAGE
PATRICK ALFRED BUXTON, 1892-1955	1
JOHRI, L. N. On a new cyclophyllidean cestode, <i>Multiceps smythi</i> n.sp., from dogs in Dublin, Eire. (With 2 Figures in the Text)	16
JOHRI, L. N. A morphological and histochemical study of egg formation in a cyclophyllidean cestode. (With Plate I and 1 Figure in the Text)	21
LLEWELLYN, J. The mechanism of the attachment of <i>Kuhnia scombri</i> (Kuhn, 1829) (Trematoda: Monogenea) to the gills of its host <i>Scomber scombrus</i> L., including a note on the taxonomy of the parasite. (With Plate II and 4 Figures in the Text)	30
BAUGH, SANJIB CHANDRA. On the morphology of <i>Neogyrodactylus indicus</i> n.g., n.sp., a viviparous monogenetic trematode (Fam. Gyrodactylidae) from <i>Argulus indicus</i> Weber. (With 6 Figures in the Text)	40
FELDMAN-MUHSAM, B. Revision of the genus <i>Hyalomma</i> . II. The subgenus <i>Hyalommina</i> . (With 11 Figures in the Text)	46
THOMAS, R. J. A comparative study of the infective larvae of <i>Nematodirus</i> species parasitic in sheep. (With 6 Figures in the Text)	60
MEYER, H. and MENDONÇA, I. DE ANDRADE. Electron microscopic observations of <i>Toxoplasma</i> 'Nicolle et Manceaux' in thin sections of tissue cultures. (With Plates III-VIII)	66
ERASMUS, DAVID A. Studies on phosphatase systems of cestodes. I. The enzymes present in <i>Taenia pisiformis</i> (cysticercus and adult). (With Plate IX and 4 Figures in the Text)	70
ERASMUS, DAVID A. Studies on phosphatase systems of cestodes. II. Studies on <i>Cysticercus tenuicollis</i> and <i>Moniezia expansa</i> (adult). (With Plate X and 4 Figures in the Text)	81
DISSANAIKE, A. S. and CANNING, ELIZABETH U. The mode of emergence of the sporoplasm in Microsporidia and its relation to the structure of the spore. (With 7 Figures in the Text)	92
GREWAL, MANOHAR SINGH. The life cycle of the British rabbit trypanosome, <i>Trypanosoma nabiasi</i> Railliet, 1895. (With 9 Figures in the Text)	100
GNANAMUTHU, C. P. Lernaeid copepods parasitic on flying fish. (With 26 Figures in the Text)	119
REES, GWENDOLEN. <i>Cercaria diplostomi phoxini</i> (Faust), a furcocercaria which develops into <i>Diplostomulum phoxini</i> in the brain of the minnow. (With Plate XI and 13 Figures in the Text)	126
RADFORD, CHARLES D. New larval mites of the family Trombiculidae (Acarina: Prostigmata). (With 22 Figures in the Text)	138

	PAGE
WALKER, JANE B. <i>Rhipicephalus humeralis</i> Rondelli 1926. (With 7 Figures in the Text)	145
SPEEDING, C. R. W. and MICHEL, J. F. The study of the transmission of the cattle lungworm (<i>Dictyocaulus viviparus</i>) in relation to pasture conditions. (With Plates XII and XIII)	153
JANSEN, J., JNR. <i>Knemidokoptes pilae</i> Lavoipierre & Griffiths, 1951, found on <i>Palaeornis torquatus</i> and <i>Ara</i> sp., with a special note on the bases of the adscutal setae. (With 7 Figures in the Text)	160
KABATA, Z. Note on a new host of <i>Myxobolus aeglefini</i> . (With 1 Figure in the Text)	165
ARTHUR, DON R. The capitulum and feeding mechanism of <i>Dermacentor parumapterus</i> Neumann 1901. (With 34 Figures in the Text)	169
MINTER, D. M. Some field and laboratory observations on the British harvest mite, <i>Trombicula autumnalis</i> Shaw	185
DASGUPTA, B. and RAY, H. N. The intranuclear inclusions in the mid-gut of the larva of <i>Anopheles subpictus</i>	194
LIANG-SHENG, YEH. On a filarial parasite, <i>Deraïophoronema freitaslenti</i> n.sp., from the giant anteater, <i>Myrmecophaga tridactyla</i> from British Guiana, and a proposed reclassification of <i>Dipetalonema</i> and related genera. (With 9 Figures in the Text)	196
MILLER, N. C. E. <i>Harmosticana garnhami</i> gen. nov., sp.n. (Lygaeidae: Hemiptera-Heteroptera) associated with a mammal in East Africa. (With 1 Figure in the Text)	206
DINNIK, J. A. and DINNIK, N. N. Development of <i>Paramphistomum sukari</i> Dinnik, 1954 (Trematoda: Paramphistomidae) in a snail host. (With 9 Figures in the Text)	209
AUDY, J. R. A checklist of trombiculid mites of the Oriental and Australasian regions	217
SINHA, T. B. <i>Mehracula</i> Sinha, 1954, a synonym of <i>Leptotrombidium</i> Nagayo <i>et al.</i> with corrigenda	295

NOS. 3, 4 (DECEMBER 1957)

GIBBS, ALFRED J. <i>Leptomonas serpens</i> n.sp., parasitic in the digestive tract and salivary glands of <i>Nezara viridula</i> (Pentatomidae) and in the sap of <i>Solanum lycopersicum</i> (tomato) and other plants. (With 1 Figure in the Text)	297
CROFTON, H. D. Nematode parasite populations in sheep on lowland farms. III. The seasonal incidence of species. (With 9 Figures in the Text)	304
BIRD, ALAN F. and DEUTSCH, KARL. The structure of the cuticle of <i>Ascaris lumbricoides</i> var. <i>swis.</i> (With Plates XIV-XVI)	319
TILL, W. M. Two new parasitic mites (Acarina) from the South African porcupine. (With 6 Figures in the Text)	329

	PAGE
DISSANAIKE, A. S. The morphology and life cycle of <i>Nosema helminthorum</i> Moniez, 1887. (With 39 Figures in the Text)	335
ARTHUR, DON R. The male of <i>Ixodes thompsoni</i> Arthur, 1955. (With 7 Figures in the Text)	347
SPRENT, J. F. A. A new species of <i>Neoscaris</i> from <i>Rattus assimilis</i> , with a re-definition of the genus. (With Plate XVII and 10 Figures in the Text)	350
FOSTER, R. Observations on laboratory colonies of the tsetse flies <i>Glossina morsitans</i> West. and <i>Glossina austeni</i> Newstead.	361
SOLTYS, M. A. Immunity in trypanosomiasis. I. Neutralization reaction. (With 1 Figure in the Text)	375
SOLTYS, M. A. Immunity in trypanosomiasis. II. Agglutination reaction with African trypanosomes. (With 1 Figure in the Text)	390
CRAGG, J. B., FOSTER, R. and VINCENT, M. Larval trematodes (Brachylaemidae) from the slugs <i>Milax sowerbii</i> (Férussac), <i>Agriolimax reticulatus</i> (Müller) and <i>Arion lusitanicus</i> Mabille. (With 5 Figures in the Text)	396
JAYEWARDENE, L. G. The merthiolate iodine formaldehyde concentration technique for the detection of parasitic material in faecal samples.	405
MICHELSON, EDWARD H. Studies on the biological control of schistosome-bearing snails. Predators and parasites of fresh-water mollusca: a review of the literature	413
WOTTON, R. M. and HALSEY, H. R. The ingestion of particulate fat from the blood by <i>Trypanosoma lewisi</i> and <i>Trypanosoma equiperdum</i> . (With 1 Figure in the Text)	427
LIANG-SHENG, YEH. On a new paramphistomid trematode, <i>Gigantocotyle lerouxi</i> sp.n. from the stomach of the red lechwe, <i>Onotragus lechwe</i> from Northern Rhodesia. (With 2 Figures in the Text)	432
PRICE, ROGER D. A microscopic study of <i>Pasteurella tularensis</i> in the human body louse. (With Plate XVIII and 1 Figure in the Text)	435
HUMES, ARTHUR G. <i>Lamippe concinna</i> sp.n., a copepod parasitic in a West African pennatulid coelenterate. (With 13 Figures in the Text)	447
GUPTA, P. D. On <i>Psilochasmus indicus</i> sp.n. (family Psilostomidae Odhner, 1913). (With 1 Figure in the Text)	452
THEODOR, OSKAR. The Nycteribiidae of the Ethiopian Region and Madagascar. (With 129 Figures and 3 Maps in the Text)	457
ARTHUR, D. R. The <i>Ixodes schillingsi</i> group: ticks of Africa and Madagascar, parasitic on primates, with descriptions of two new species (Ixodoidea, Ixodidae). (With 37 Figures in the Text)	544
INDEX OF AUTHORS	560
INDEX OF SUBJECTS	563