

PARASITOLOGY

EDITED BY

GEORGE H. F. NUTTALL, M.D., PH.D., Sc.D., F.R.S.

Quick Professor of Biology and Director of the Molteno Institute for Research
in Parasitology in the University of Cambridge

ASSISTED BY

D. KEILIN, Sc.D.



CAMBRIDGE UNIVERSITY PRESS

C. F. CLAY, MANAGER

LONDON: FETTER LANE, E.C. 4

ALSO

H. K. LEWIS AND CO., LTD., 136, GOWER STREET, LONDON, W.C. 1

WHELDON AND WESLEY, LTD., 2-4, ARTHUR STREET, NEW OXFORD STREET, LONDON, W.C. 2

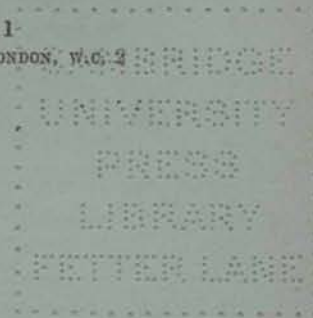
CHICAGO: THE UNIVERSITY OF CHICAGO PRESS
(AGENT FOR THE UNITED STATES AND CANADA)

BOMBAY, CALCUTTA, MADRAS: MACMILLAN & CO., LTD.

TOKYO: THE MARUZEN-KABUSHIKI-KAISHA

Fifteen Shillings net

[Issued 27 March 1924]



The University of Chicago Press

THE ANATOMY OF WOODY PLANTS. By E. C. JEFFREY. x and 478 pages, cloth; 26s net.

The author is easily the leading American authority on the anatomy of plants and his book aims to describe, analyze, and discuss the anatomical structure of the most important families of plants. It does for the anatomy of plants what so many textbooks have done for the human anatomy. 306 figures and illustrations.

THE EVOLUTION OF SEX IN PLANTS. (*The University of Chicago Science Series.*) By JOHN M. COULTER. x and 140 pages, small 12mo, cloth; 7s net.

In this work the prevalence of asexual reproduction among plants is emphasized, the author showing that in many of the lower forms sexual reproduction is unknown. The more detailed parts of the discussion are illustrated by cuts and drawings introduced into the text.

INDIVIDUALITY IN ORGANISMS. (*The University of Chicago Science Series.*) By CHARLES MANNING CHILD. x and 212 pages, small 12mo, cloth; 8s 3d net.

An attempt to state, and to present evidence in support of, a conception of the nature of organic individuality which the author has developed as a result of fifteen years' investigation of the processes of reproduction and development of lower animals.

THE STORY OF THE MAIZE PLANT. (*The University of Chicago Science Series.*) By PAUL WEATHERWAX. 300 pages, small 12mo, cloth; 9s 6d net.

The only complete, modern exposition of the morphology of the maize plant. In this volume Mr Weatherwax is interested in giving a well-balanced, reliable summary of our present botanical knowledge of maize. He eliminates the influence of the economic point of view and describes maize as a plant with problems of its own to solve, a life of its own to live, and a part of its own to play in the drama of organic existence.

SOLD IN THE BRITISH EMPIRE (EXCEPT CANADA) BY

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

Cambridge University Press

AN INTRODUCTION TO THE STUDY OF CYTOLOGY.

By L. DONCASTER, Sc.D., F.R.S., Derby Professor of Zoology in the University of Liverpool. Demy 8vo. With 24 plates and 31 text-figures. 24s net.

LIFE. A Book for Students of Elementary Biology. By Sir ARTHUR E. SHIPLEY, G.B.E., F.R.S. Crown 8vo. 6s net.

ZOOLOGY. An Elementary Textbook. By Sir A. E. SHIPLEY, G.B.E., Sc.D., F.R.S., and E. W. MACBRIDE, D.Sc., F.R.S. Fourth edition. Demy 8vo. With 360 illustrations. 22s 6d net.

THE FLEA. By H. RUSSELL, B.A., F.Z.S., M.B.O.U. Roy. 16mo. With 9 illustrations. Cloth, 2s 6d. Limp Lambskin, 3s. Cambridge Manuals of Science and Literature.

THE CAUSES OF TUBERCULOSIS. Together with some Account of the Prevalence and Distribution of the Disease. By L. COBBETT, M.D., F.R.C.S. With 23 plates and 8 diagrams. 26s net.

INDUSTRIAL COLONIES AND VILLAGE SETTLEMENTS FOR THE CONSUMPTIVE. By Sir GERMAN WOODHEAD, K.B.E., V.D., M.D., LL.D., and P. C. VARRIER-JONES, M.R.C.S., L.R.C.P., Tuberculosis Officer for the County of Cambridge. With a Preface by Sir CLIFFORD ALLBUTT. Demy 8vo. Paper covers, 9s net; cloth, 10s 6d net.

Cambridge University Press, Fetter Lane, London, E.C. 4; C. F. Clay, Manager

PARASITOLOGY

CAMBRIDGE UNIVERSITY PRESS

LONDON: FETTER LANE, E.C. 4



H. K. LEWIS AND CO., LTD., 136, GOWER STREET, LONDON, W.C. 1
WHELDON AND WESLEY, LTD., 2-4, ARTHUR STREET, NEW OXFORD
STREET, LONDON, W.C. 2

CHICAGO: UNIVERSITY OF CHICAGO PRESS
(AGENT FOR THE UNITED STATES)

BOMBAY, CALCUTTA AND MADRAS: MACMILLAN AND CO., LTD.

TOKYO: THE MARUZEN-KABUSHIKI-KAISHA

All rights reserved

PARASITOLOGY

EDITED BY

GEORGE H. F. NUTTALL, F.R.S.

QUICK PROFESSOR OF BIOLOGY AND DIRECTOR OF THE MOLTEANO INSTITUTE
FOR RESEARCH IN PARASITOLOGY IN THE UNIVERSITY OF CAMBRIDGE

ASSISTED BY

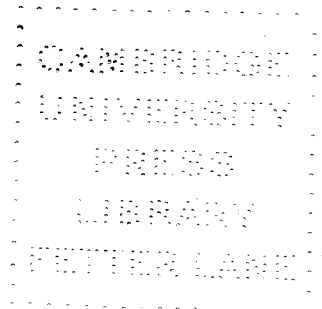
D. KEILIN, Sc.D.

VOLUME XVI 1924

CAMBRIDGE

AT THE UNIVERSITY PRESS

1924



.....
H
Y
S
I
N
A
P
I
T
O
R
.....

PRINTED IN GREAT BRITAIN

CONTENTS

No. 1 (JANUARY)

	PAGE
CIUREA, J. Heterophyidés de la Faune Parasitaire de Roumanie. (Avec les Planches I—V).	1
BAER, JEAN G. Description of a New Genus of Lepodermatidae (Trematoda) with a Systematic Essay on the Family. (With 2 Text-figures)	22
PAVLOVSKY, E. N. und STEIN, A. K. Die Gastrophilus-Larve als Gastparasit in der Menschenhaut. (Mit 5 Abbildungen)	32
VINCENT, MARY. On a New Gregarine <i>Anisolobus dacnecola</i> n.g., n.sp., a Parasite of <i>Dacne rufifrons</i> Fabr. (Coleoptera). (With 3 Text-figures)	44
MEGGITT, F. J. On Two Species of Cestoda from a Mongoose. (With 2 Text-figures)	48
FERRIS, G. F. The Mallophagan Family Menoponidae. Part I. (With 5 Text-figures)	55
CAWSTON, F. G. Distribution of Snails serving as Intermediate Hosts of Flukes in South Africa	67
WOODLAND, W. N. F. On the Life-Cycle of <i>Hymenolepis fraterna</i> (<i>H. nana</i> var. <i>fraterna</i> Stiles) of the White Mouse	69
PURI, I. M. Studies on the Anatomy of <i>Cimex lectularius</i> . I. (With Plate VI and 12 Text-figures)	84
HADWEN, S. and FULTON, J. S. On the Migration of <i>Hypoderma lineatum</i> from the Skin to the Gullet. (With Plate VII)	98
DSCHUNKOVSKY, E. and URODSCHEVICH, V. Theileriasis in Goats, Sheep and Cattle, with a Description of <i>Theileria hirci</i> n.sp. from Serbia. (With 2 Text-figures)	107
HINDLE, EDWARD. Myiasis in <i>Bufo regularis</i> caused by a Tabanid Larva. (With Plate VIII)	111
KEILIN, D. On the Life History of <i>Neottiophilum praeustum</i> (Meigen 1826) (Diptera-Acalyptera) Parasitic on Birds, with some general considerations on the Problem of Myiasis in Plants, Animals and Man. (With Plate IX and 3 Text-figures)	113

No. 2 (MARCH)

	PAGE
NICOLL, WILLIAM. A Reference List of the Trematode Parasites of British Freshwater Fishes	127
PAVLOVSKY, E. N. and STEIN, A. K. <i>Maculae coeruleae</i> and <i>Phthirus pubis</i> . (With 5 Text-figures)	145
KEILIN, D. On the Life History of <i>Anthomyia procellaris</i> Rond. and <i>A. pluvialis</i> L. inhabiting the Nests of Birds. (With 12 Text-figures)	150
CHANDLER, ASA C. A New Genus of Trichostrongylid Worms from the Kangaroo. (With 5 Text-figures)	160
SAUNDERS, LESLIE G. On the Life History and the Anatomy of the Early Stages of <i>Forcipomyia</i> (Diptera, Nemat., Ceratopogoninae). (With Plates X—XII and 26 Text-figures)	164
NUTTALL, GEORGE H. F. Biographical Notes bearing on Koch, Ehrlich, Behring and Loeffler, with their Portraits and Letters from three of them. (With Portrait-plates 26–29, two Letters and a Signature in facsimile)	214
KEILIN, D. The Absence of Paedogenetic Multiplication in the Blow-fly (<i>Calliphora erythrocephala</i>). (With 3 Text-figures)	239
NUTTALL, GEORGE H. F. The Anomalous Position of Parasitology in the Medical Curriculum in England	248

No. 3 (JULY)

DUKE, H. LYNDBURST. Further Observations on the Effects of Direct Transmission on Trypanosomes	251
CAMERON, A. E. <i>Sarcoptes</i> of Cattle. (With 6 Text-figures)	255
MEGGITT, F. J. On the Collection and Examination of Tapeworms	266
PURI, I. M. Studies on the Anatomy of <i>Cimex lectularius</i> L. II. The Stink Organs. (With 6 Text-figures)	269
BHATIA, B. L. and SETNA, SAM. On some New Cephaline Gregarines. (With 23 Text-figures)	279
LEIGH-SHARPE, W. HAROLD and PERKINS, MICHAEL G. L. Some Parasitic Copepoda from Iceland. With an Account of <i>Peniculus clavatus</i> , the Conjunctive Tubes of <i>Chondracanthus nodosus</i> and the Males of <i>Clavella dubia</i> . (With 8 Text-figures)	289

Contents

vii

	PAGE
VINCENT, MARY. On a New Gregarine, <i>Gregarina segmentata</i> n.sp., an Intestinal Parasite of <i>Cis bidentatus</i> Olivier (Coleoptera). (With 9 Text-figures)	296
MEGGITT, F. J. The Tapeworms of the Rangoon Pigeon. (With Plate XIII and 5 Text-figures)	303
JACOB, ERICH. Die Verwandtschaftsbeziehungen der Zeckengattungen. Versuch eines natürlichen Systems auf vergleichend-morphologischer Grundlage	313
GRAYBILL, H. W. <i>Obeliscoides</i> , a New Name for the Nematode Genus <i>Obeliscus</i>	317
KEILIN, D. On a Case of Intestinal Myiasis in Man produced by the Larvae of a Sarcophagine Fly. (With 2 Text-figures)	318
HENTSCHEL, C. C. On a New Ciliate, <i>Cryptochilum boreale</i> nov. sp., from the Intestine of <i>Echinus esculentus</i> Linn., together with some Notes on the Ciliates of Echinoids. (With 3 Text-figures)	321
NICOLL, WILLIAM. A Reference List of the Trematode Parasites of British Reptiles	329
BAYLIS, H. A. Biographical Notes on Bilharz, Looss and Lühe. (With Portrait-plates 30-32)	332
EWING, H. E. Notes on the Taxonomy and Natural Relationships of Fleas, with descriptions of Four New Species. (With Plate XIV and 1 Text-figure)	341

NO. 4 (DECEMBER)

GRASSI, BATTISTA. Twenty-five Years After. A Chronicle of the discoveries relating to the mode of transmission of Human Malaria	355
ROSS, I. CLUNIES. The Bionomics of <i>Ixodes holocyclus</i> Neumann, with a redescription of the Adult and Nymphal Stages and a description of the Larvae. (With Plate XV and 2 Text-figures)	365
MACGREGOR, MALCOLM E. Tests with <i>Chara foetida</i> and <i>C. hispida</i> on the development of Mosquito Larvae	382
MACGREGOR, MALCOLM E. Special Apparatus and Technique for the Study of Mosquitoes and other Aquatic Insects. (With 7 Text-figures)	388
CHANDLER, ASA C. New Filariæ from Indian Birds. (With 10 Text-figures)	398

No. 4 (DECEMBER) *continued*

	PAGE
KESSEL, QUINTA CATTELL. Notes on the Streblinae, a Subfamily of the Streblidae (Diptera Pupipara). (With 9 Text-figures)	405
BAYLIS, H. A. The Range of Variation of <i>Hymenolepis nana</i> in Rats and Mice	415
BOULENGER, C. L. The Filariid of the Camel, <i>Acanthocheilonema evansi</i> (Lewis). (With 4 Text-figures)	419
WOODLAND, W. N. F. On the Development of the Human <i>Hymenolepis nana</i> (Siebold 1852) in the White Mouse; with remarks on " <i>H. fraterna</i> ," " <i>H. longior</i> " and <i>H. diminuta</i>	424
STUNKARD, H. W. A New Trematode, <i>Oculotrema hippopotami</i> n.g., n.sp., from the Eye of the Hippopotamus. (With Plate XVI)	436
WOODLAND, W. N. F. On a New Bothriocephalus and a New Genus of Proteocephalidae from Indian Fresh-water Fishes. (With Plate XVII, including Figs. 1-35)	441
Index of Authors	452
Index of Subjects	454