
This work is the most complete and comprehensive yet published on the proteocephalid tapeworms. The author has gathered together and carefully compiled the observations of other investigators on this group, and with this compilation he has combined in monographic form a large mass of data collected from his own studies on the various species of the family. The Proteocephalidae occur in fresh-water fishes, reptiles and amphibia, and comprise five genera and about fifty species. Excepting the genera Acanthotaenia and Corallobothrium which are only touched upon incidentally, the author has covered the various species not only of this group but also those belonging in the genus Monticella LaRue, 1911 (Tetracotylus Monticelli, renamed), which he separates from the Proteocephalidae as the type of a nearly related but distinct family, Monticellidae. The morphology, which is illustrated with 199 figures, synonymy, host records, etc., are fully discussed for each species. The portion of the work pertaining to general questions such as geographical distribution, host relationships, etc., is of special interest to economic zoologists, because as already pointed out by Ward (1910) valuable clues in clearing up certain problems in the biology of food fishes are likely to be picked up from a knowledge of fish parasites.


This pamphlet, published for the information of medical officers in the army, gives a careful and clearly written synopsis of present knowledge on the organism of malaria and its transmitting agents. The work opens with a discussion of the methods for studying both living and preserved material, the structure, life history and habits of the various species of Plasmodium occurring in man and of the types of Anopheline mosquitoes that transmit them. Further chapters deal in extenso with the prophylactic methods and their application to the military service. At the close is given a bibliography of important references which though complete contains some errors and irregularities of citation that may embarrass inexperienced students.

The Anales de Zoologia Aplicada, recently established in Chile is devoted to the biological and systematic study of animal parasites (Arthropoda, Vermes, and Protozoa) of the neotropical region. The editor, Professor Carlos E. Porter, Director of the Zoological Museum at Santiago, is known for extensive and valuable work in research and as editor of the Revista Chilena de Historia Natural.


In his preface the author emphasizes the desirability of a work of this nature, owing to the great importance of amebic infections of the intestine and liver in man, and to the great frequency with which such infections are met both in our tropical possessions and in certain parts of this country.

The first chapter gives a historical review of the important investigations relating to amebae found in man. In the second chapter the morphology and
biology of amebae, and the methods of reproduction are discussed with a brief historical review of the resistance of amebae to physical and chemical agencies. In a discussion of the classification and nomenclature of the organisms Craig points out that a pathogenic and non-pathogenic species of ameba in man were first demonstrated by American investigators rather by Jürgens and Schaudinn. It is true that from a zoological standpoint Schaudinn gave the most complete description of two species of amebae found in the intestine in man, but a number of his observations regarding one species are unconfirmed. As Craig points out, however, Schaudinn's classification has been generally accepted by zoologists, although few have observed the morphological characteristics of *Entamoeba histolytica* he described.

Craig gives complete account of the technic of examination of amebae in the fresh state and the methods to be employed in fixing and staining them. The method devised by Wollbach for the hardening of tissues and staining of trypanosomes in sections, which is also an excellent one for staining amebae in sections, might have been added. The cultivation of these organisms is then discussed and the fact pointed out that all amebae which have been cultivated upon artificial media are free living species and of no etiological significance in dysentery, whereas the parasitic amebae have not been cultivated. In the sixth chapter the distribution, morphology, reproduction, life cycle, attempts at cultivation, and relation to disease of the different species of human intestinal amebae are considered very exhaustively, and the characteristics of the different species illustrated by plates and figures. The differential diagnosis of *Entamoeba coli*, *Entamoeba histolytica*, and *Entamoeba tetragena*, is also discussed and a table given showing the differential features. The author emphasizes rightly that a differential diagnosis of these species does not rest upon the presence of a single morphological feature, but should only be made after a careful consideration of all morphological data, as well as the life cycle of the organisms investigated. Craig apparently regards *Entamoeba histolytica* and *Entamoeba tetragena* as different species, whereas Walker believes tetragena is a variety of histolytica.

In discussing the amebae of the mouth, Craig points out that the distribution of the common species, *Entamoeba buccalis*, is world-wide, and that while it is sometimes found in carious teeth, there is no experimental evidence connecting it with disease. He shows that it may be frequently demonstrated in material scraped from the roots of perfectly normal teeth, and that so far as the evidence goes, it must be regarded as only a secondary invader of the tissues. It is very doubtful if this form has anything to do with caries of the teeth. The other ameba found in the mouth he agrees with Prowazek are identical with *Entamoeba buccalis*. Brief reference is made to the occurrence of amebae in the genito-urinary tract, in exudations and abscesses, and in the lungs.

The book is well printed, is written in an interesting manner, and constitutes an important addition to the literature on this subject.

The Government Bureau of Microbiology (New South Wales) has a division devoted to animal parasites. Its Third Report includes several important notes by J. Burton Cleland. Coccidia (probably *Eimeria stiedae*), reported for the first time in Australian cattle were found in moderate numbers in the caecum of a cow. More than half the house sparrows examined during 1911 and 1912 were found to be infected with *Isospora lacazei* (Labbe), known in England from various passerine birds. An attempt to introduce this parasite experimentally into chickens was unsuccessful.

The most extended communication is a study of the life history of *Onchocerca gibsoni*. These worm-nests in cattle which had never left Milson's Island gave localized conditions for study. The distribution of the parasite...
and the finding of living embryos in subcutaneous situations suggests an insect vector. Either the stable fly (Stomoxys calcitrans), or a mosquito (Culicicella vigilax) may be the carrier. Experiments showed that Stomoxys calcitrans can ingest living embryos from opened worm-nests and these embryos remain alive and active in its alimentary canal as long as three days. An attempt to infect a calf through Stomoxys calcitrans which had ingested living embryos was not successful. Calves could not be infected by embryos taken with milk or injected subcutaneously. The position of worm-nests and free embryos makes it probable that infection first occurs in the lower extremities and that the embryos migrate along the lymph channels.

NOTES

Doctor Richard P. Strong, Professor of Tropical Diseases in the Harvard Medical School, and a member of the Editorial Board of the Journal, has just left for Servia as chairman of the Sanitary Commission sent by the American Red Cross to aid in the control and suppression of typhus, cholera and other epidemic diseases. Doctor Strong's admirable record during the terrible epidemic of pneumonic plague in Manchuria in 1911 makes him an ideal leader for this, which Surgeon General Gorgas believes the most important sanitary work in years.

Professor Doctor A. Looss, the well-known helminthologist, who was formerly pathologist in the Medical School at Cairo, Egypt, retired from that position with the outbreak of the war. He is now in Germany engaged in scientific work, and wishes to announce his address for the future as Stephansstrasse 18, Leipzig.

**View This Item Online:** https://www.biodiversitylibrary.org/item/87019

**DOI:** https://doi.org/10.2307/3271120

**Permalink:** https://www.biodiversitylibrary.org/partpdf/316148

**Holding Institution**
University of Toronto - Gerstein Science Information Centre

**Sponsored by**
University of Toronto

**Copyright & Reuse**
Copyright Status: Not provided. Contact Holding Institution to verify copyright status.

This document was created from content at the Biodiversity Heritage Library, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.

This file was generated 18 September 2023 at 06:47 UTC