

## INTERNATIONAL SYMPOSIUM ON ECOLOGY AND PHYSIOLOGY OF PARASITES

An International Symposium on Ecology and Physiology of Parasites was held at the University of Toronto on February 19 and 20, 1970. The Symposium was organized by the Department of Parasitology, School of Hygiene, University of Toronto. Its Chairman was Professor A. M. Fallis, Head of the same Department.

In the presence of an audience of more than 300 parasitologists from several countries, assembled in the modern Medical Sciences Auditorium, 12 invited speakers presented papers summarizing the present knowledge and modern developments in the ecology and physiology of different groups of parasites. Each lecture was then followed by discussion led by another invited speaker.

The ecology and physiology of parasitic Protozoa were discussed in 4 lectures. Dr. R. Lainson and Dr. J. J. Shaw (Instituto E. Chagas, Belem, Para, Brazil) presented a summary of their very important research on ecology of leishmaniasis in the New World and especially in Brazil. Dr. K. Vickermann (University of Glasgow, Scotland) discussed morphological and physiological characters of extracellular blood protozoa with special emphasis on trypanosomes. Dr. D. M. Hammond (Utah State University, Logan, USA) talked on the development and ecology of coccidia and other intracellular parasites. The pertinence of this paper was stressed by the fact that in the days immediately preceding the Symposium several authors had shown that the protozoan *Toxoplasma* was actually a coccidian of the genus *Isospora*. Dr. J. Vávra (Institute of Parasitology, Prague, Czechoslovakia) reported on physiological and ecological adaptations in microsporidia and gregarines as reflected in their morphology and ultrastructure.

Six papers were devoted to the ecology and physiology of parasitic helminths. These were the "Microcosm of intestinal helminths" by

Dr. C. P. Read (Rice University, Texas, USA), "Site finding behaviour in helminths in intermediate and definitive hosts" by Dr. M. J. Ulmer (Iowa State University, Ames, USA), "Physiology and behaviour of monogenean skin parasite in relation to its fish host" by Dr. G. C. Kearn (University of East Anglia, Norwich, England). Dr. B. O. L. Duke (Helminthiasis Research Unit, Kumba, Federal Cameroon Republic) reported on the ecology of onchocerciasis in man and animals. Dr. D. L. Lee (Houghton Poultry Research Station, Huntingdon, England) stressed the role of helminths as vectors of microorganisms, especially as viruses and protozoa are concerned. Dr. H. R. Wallace (CSIRO, Glen Osmond, Australia) analysed the modes and mechanics of movement of nematodes in the external environment.

Two papers represented the ecology of parasitic arthropods. Mr. J. A. Downes (Department of Agriculture, Ottawa, Canada) discussed the evolutionary perspective of the ecology of bloodsucking Diptera and Dr. W. C. Reeves (University of California, Berkeley, USA) talked on the mosquito vector and vertebrate host interaction as a key to the maintenance of certain arboviruses.

The Symposium was significant in showing the importance of ecological and physiological aspects of modern parasitology. It further proved that a scientific meeting with limited but well selected topics could be highly informative and attractive.

The Symposium was followed by a Meeting of the Regional Parasitology Club at the University of Toronto on February 21. During this meeting further 21 papers were presented, dealing mostly with parasitic worms.

The papers presented at the Symposium on Ecology and Physiology of Parasites will appear in a special publication of the Toronto University press.

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