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Parasitologie. Biologie der Humanparasiten

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Both authors are affiliated with the Institute of Zoology, Universtity at Tübingen (Germany). As declared in the foreword, parasites may be detected in all groups of organisms. The origin of parasitism is polyphyletic. For cyclically transmitted parasites present warmblooded hosts and arthropod vectors variable specific biotops. The authors consider parasitology a partial field of ecology and parasitism a special condition of symbiosis. This idea apparently influences the conception and the architecture of this publication. The volume is composed of eight sections divided into chapters and subchapters according to the decimal system. Each section concludes a list of references.

The introductory section 1 is intended to give an overview on general aspects and basic definitions of parasitism: host-parasite relationships, physiological relations, infection and reinfection, immune reactions, premunition, and the like. Further on, discussed are biological and medical aspects of parasitology. In section 2 cyclically transmitted parasitoses are outlined: malaria with anopheline mosquitoes, onchocerciasis with blackflies, filarial worms and circulating microfilariae, Chagas disease and triatomine bugs, African sleeping sickness and tsetse-flies, leishmaniases and phlebotomine sandflies, piroplasms and hard ticks, toxoplasmosis and sarcosporidiosis, schistosomiasis and snails, liver, intestinal and lung flukes, and tapeworms. Particular chapters incorporate the life cycles and development of individual species of parasites in final hosts as well in vectors, the biology of arthropod vectors, epizootiology, epidemiology, pathogenesis, clinical course of disease and treatment.

Section 3 implicates intestinal and lung parasites while examining the evolution of transentero-somatic and percutaneous-somatic transmissions of some nematodes. In this section attention is given also to *Entamoeba histolytica* and to other lumen-dwelling protozoans.

Section 4 is devoted to the arthropods transmissing microbial infectious diseases: rickettsioses and lice, tsutsugamushi fever and mites, relapsing fever and soft ticks, plague and fleas, yellow fever and *Aedes* mosquitoes. Section 5 deals with the trachoma. Section 6 places emphasis to selected chapters of arachno-entomology while analyzing general morphological features, flies as agents of myiasis, and morphology of hard and soft ticks. Chapter 7 is concerned with malacology which constitutes a scientific part of zoology important for helminthological studies. Concluding section 8 points up some general principles of interest for students as well for professionals: ecological equivalents including regulation mechanisms, alternative strategy, balance strategy, density regulation, etc. Further on, explained are various definitions of epidemiological phenomena, mechanisms of defense reactions in invertebrates, programmed cell death, and the state of health in relation to parasitism. Final chapters comprise some statistical tests, the principles of evolution of parasitism, antiparasitic measures and some remarks on parasitophobia. In addition, there are overviewing textual "boxes" separated from the main text by frames, and 12 summary-type tables. There is also a list of abbreviations and a glossary of fundamental parasitological terms. The volume is extensively illustrated by161 almost line drawings.

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