

Preface

Digenetic trematodes are a major group of parasites of humans and animals and are distributed worldwide. They have a complex life cycle and require at least two hosts, one of which is usually a mollusk. Over 100 species of digenetic trematodes have been recorded infecting humans and the list is very extensive considering the trematode species that parasitize animals. The morbidity and mortality caused by several species in humans can be considered mild or even benignant, though other species have important implications for human health. For example, schistosomiasis affects more than 200 million people and causes almost 300,000 deaths per year. Moreover, it is well established that several species of trematodes act as promoters of malignancy. Despite these facts, human trematode infections have been neglected for years, probably in relation to their limited distribution to low- and middle-income countries. However, this picture has been changing in recent years. Factors such as the migration flows, increased international tourism, changes in alimentary habits, and the globalization of food markets are expanding their geographical limits and the population at risk worldwide.

In this book, we draw attention to trematode infections that cause disease in humans and other trematodes of interest in veterinary and wildlife. To this purpose, the book has been divided into three parts. The first part is devoted to analyze the modern concepts on the biology and systematics of trematode. The second part focuses on the groups of trematodes that have important implications for human health. Each of the six major groups of human trematodes and the corresponding diseases (schistosomiasis, fascioliasis, paragonimiasis, opisthorchiasis, and clonorchiasis and the intestinal trematodes) are dealt with under separate chapters. Moreover, the section is completed with two chapters dealing with the epidemiology and diagnoses of trematode infections. In these chapters, emphasis is placed on recent advances and gaps in our understanding that must be filled to complete the knowledge of these trematodes. In the third part of the book, the main groups of trematodes of veterinary and wildlife interest are analyzed. As mentioned above, the list of potential trematodes that might be discussed in this section is vast.

For convenience, we have chosen to focus the chapters on those groups of trematodes that are also recognized to have implications for human health.

The main goal of the book is to present the trematodes and the corresponding diseases in the framework of modern parasitology, considering matters such as the application of novel techniques and analysis of data in the context of host–parasite interactions and to show applications of new techniques and concepts to the studies on digenetic trematodes.

In summary, in this book the most recent information of the major groups of digenetic trematodes is compiled with the aim of providing an update of the current status of knowledge on these important parasites in the context of modern parasitology.

Rafael Toledo
Bernard Fried

Digenetic Trematodes

Toledo, R.; Fried, B. (Eds.)

2014, XI, 474 p. 45 illus., 41 illus. in color., Hardcover

ISBN: 978-1-4939-0914-8