



# INTERNATIONAL CONFERENCE ONE HEALTH AND ZOOLOGY

**PROGRAM & ABSTRACTS** 

September 27–29, 2023 Hissarya, Bulgaria

International Conference One Health and Zoology *Program & Abstracts* September 27–29, 2023 Hissarya, Bulgaria

Published by Medical University of Plovdiv, University Publishing Center

### **FOREWORD**

Dear colleagues and friends,

On behalf of the Organizing Committee it is our great pleasure to welcome you to the **International Conference "One Health and Zoology"**.

We are happy that the conference, with its location at wonderful ancient town of Hisarya, has attracted such an interest.

The scientific forum is organized by the Plovdiv University "Paisii Hilendarski" – Department of Zoology, the Medical University of Plovdiv, the National Center for Infectious and Parasitic Diseases, the Bulgarian Food Safety Agency with the active support of the Ministry of Health, and the Southeast European Center for Surveillance and Control of Infectious Diseases in Tirana (SECID).

The purpose of the conference is to enable scientific researchers, university academics, students, veterinarians, epidemiologists, microbiologists, virologists, and other experts in the subject, to present scientific results and exchange experience and ideas related to epidemiology, vaccines, the control of zoonotic diseases and their vectors, taxonomy, faunistics, ecology, applied zoology, genetics, molecular biology, etc. The conference aims to promote the One Health approach in the prevention of infectious diseases common to humans and animals and the coordination of various departments and stakeholders in this field.

We hope that the **International Conference "One Health and Zoology"** will provide an opportunity for a dynamic exchange of information, ideas and scientific discoveries and will enable the participants to network, facilitate future collaborations for further research in a pleasant and relaxed environment.

We wish you fruitful work, success and a pleasant stay in beautiful town of Hisarya and in Bulgaria!

Welcome! The Organizers

### Committees

# **Organizing Committee**

Assoc. Prof. Dr. **Angel Kunchev**, MD, Ministry of Health, Republic of Bulgaria

Prof. DSc Iva Christova, National Center of Infectious and Parasitic Diseases

Prof. DSc **Boyko Georgiev**, Institute of Biodiversity and Ecosystems Research, BAS

Prof. Dr. Yordanka Stoilova, MD, Medical University of Plovdiv

Prof. Dr. Ani Kevorkyan, MD, Medical University of Plovdiv

Assoc. Prof. Dr. Silvia Bino, MD.

Control of Infectious Diseases Department, Institute of Public Health, Albania

Prof. DSc Nikola Sabev, "Angel Kanchev" University of Ruse

Dr. **Svetlozar Patarinski**, Bulgarian Food Safety Agency

Assoc. Prof. Dr. **Hristo Dimitrov**, University of Plovdiv

Assoc. Prof. Dr. **Anelia Stojanova**, University of Plovdiv

Chief Assist, Prof. Dr. Vesela Mitkovska, University of Ploydiv

Chief Assist. Prof. Dr. Miroslav Antov, University of Plovdiv

## **Support team**

Assoc. Prof. Dr. **Peter Boyadzhiev**, University of Plovdiv

Ivanka Popova, University of Plovdiv

#### **Scientific Committee**

Prof. DSc **Boyko Georgiev**, Institute of Biodiversity and Ecosystems Research, BAS

Prof. DSc Paraskeva Mihaylova,

Institute of Biodiversity and Ecosystems Research, BAS

Prof. DSc **Georgi Markov**, Institute of Biodiversity and Ecosystems Research, BAS

Prof. DSc Iva Christova, National Center of Infectious and Parasitic Diseases

Prof. Dr. Yordanka Stoilova, MD, Medical University Plovdiv

Prof. Dr. Ani Kevorkyan, MD, Medical University of Plovdiv

Prof. Dr. **Snezhana Grozeva**, Institute of Biodiversity and Ecosystems Research, BAS

Prof. Dr. **Roumiana Metcheva**, Institute of Biodiversity and Ecosystems Research, BAS

Prof. DSc **Evgeniya Ivanova**, University of Plovdiv

Prof. Dr. **Teodora Staykova**, *University of Plovdiv* 

Assoc. Prof. Dr. Tsenka Chassovnikarova.

Institute of Biodiversity and Ecosystems Research, BAS

Assoc. Prof. Dr. Michaela Nedialkova,

Institute of Biodiversity and Ecosystems Research, BAS

Assoc. Prof. Dr. **Hristo Dimitrov**, *University of Ploydiv* 

Assoc. Prof. Dr. Anelia Stojanova, University of Plovdiv

# The intestinal nematode fauna of bats of the genus *Myotis* (Chiroptera: Vespertilionidae) in Serbia

Žolt Horvat<sup>1</sup>, Borislav Čabrilo<sup>2</sup>, Milan Paunović<sup>3</sup>, Branko Karapandža<sup>4</sup>, Jelena Josipović<sup>3</sup>, Ivana Budinski<sup>5</sup>, Božana Tošić<sup>2,\*</sup>, <u>Olivera Bielić Čabrilo<sup>2</sup></u>

- <sup>1</sup> Agricultural school with student dormitory, Maršala Tita 167, Bačka Topola, Serbia
- <sup>2</sup> University of Novi Sad, Faculty of Sciences, Department of Biology and Ecology, Trg Dositeja Obradovića 2, 21000 Novi Sad, Serbia
- <sup>3</sup> Institute of Animal Breeding and Genetics, University of Veterinary Medicine Vienna: Vienna, Veterinärplatz 1, Vienna, Austria
- <sup>4</sup> Fauna C&M, Zemunska 19, Novi Banovci, Serbia
- Department of Genetic Research, Institute for Biological Research "Siniša Stanković" National Institute of Republic of Serbia, University of Belgrade, Bulevar Despota Stefana 142, 11000 Belgrade, Serbia
- \* Corresponding author: Božana Tošić, e-mail: bozana.tosic@dbe.uns.ac.rs

ABSTRACT: Bats are the only true flying mammals, and their capacity for flight has contributed to their worldwide distribution. Consequently, they have important functional roles in terrestrial ecosystems in general. These mammals are reliable bioindicators of the condition of the environments they inhabit and have a regulatory effect on the abundance of crepuscular and nocturnal insects. Many species of bats feed on insects that are either vectors of pathogens that cause diseases of animals and people, or agricultural pests that inflict grave economic losses. The endoparasitic helminths of bats have attracted relatively little attention from parasitologists; therefore, the aim of this study is to contribute to the knowledge on the intestinal nematodes of *Myotis* bats in Serbia. We investigated the helminth fauna of 65 individual bats belonging to five different species of the genus Myotis (M. mystacinus, M. alcathoe, M. brandtii, M. blythii, M. myotis). The hosts were sampled from ten sites on the territory of Serbia. Four nematode species were identified: Molinostrongylus alatus, Capillaria neopulchra, Physaloptera sp. and Rictularia bovieri. Intestinal nematodes infected 48 host individuals, resulting in a prevalence of 73.8%. Molinostrongylus alatus had the highest prevalence (64.6%) and mean abundance (8.2). None of the registered nematode species have zoonotic potential.

**Key words:** Chiroptera, *Myotis*, roundworms, prevalence, helminths

**Acknowledgments:** Bat research was financially supported by the Ministry of Environmental Protection of Serbia (project number 401-00-200/2016-17, project title "Monitoring of Bat Populations and Roosts in Serbia"). The authors gratefully acknowledge the financial support of the Ministry of Science, Technological Development and Innovation of the Republic of Serbia (Grant No. 451-03-47/2023-01/200125).