

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/355585791>

AN AUTOCHTHONOUS CASE OF FELINE THELAZIOSIS IN NORTH MACEDONIA

Conference Paper · October 2021

CITATIONS

0

READS

34

5 authors, including:



[Aleksandar Cvetkovikj](#)

Saints Cyril and Methodius University of Skopje

94 PUBLICATIONS 327 CITATIONS

[SEE PROFILE](#)



[Ljubica Rashikj](#)

Saints Cyril and Methodius University of Skopje

22 PUBLICATIONS 21 CITATIONS

[SEE PROFILE](#)



[Iskra Cvetkovikj](#)

Saints Cyril and Methodius University of Skopje

60 PUBLICATIONS 192 CITATIONS

[SEE PROFILE](#)

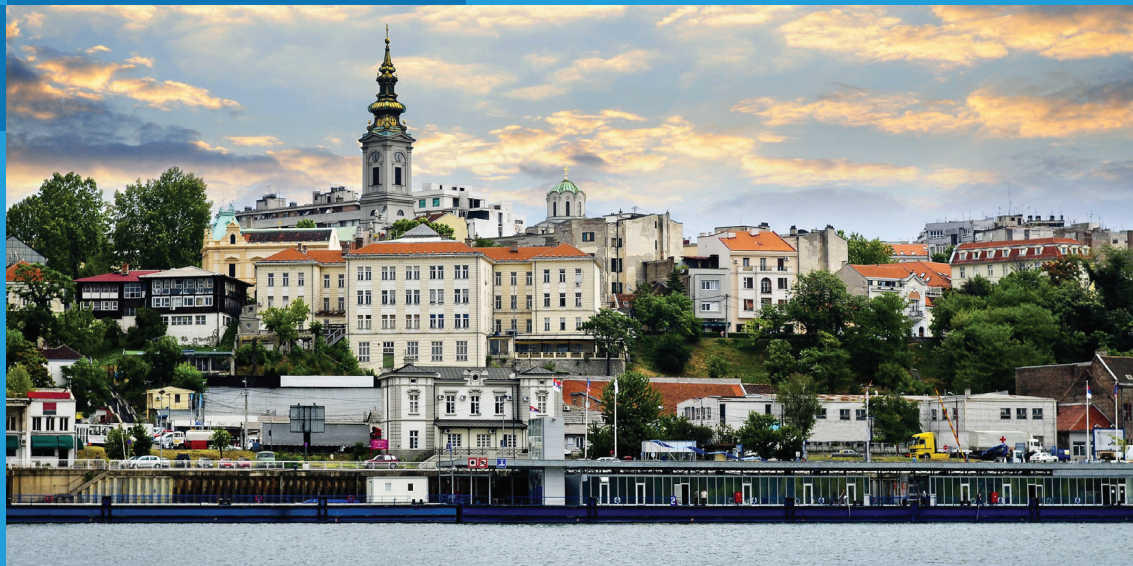
13th EUROPEAN MULTICOLLOQUIUM OF PARASITOLOGY





emop 20^{XIII}
21

changing climate
changing parasites

Programme
& Abstract
Book

Belgrade, Serbia
October
12-16, 2021





13th European Multicolloquium of Parasitology
Belgrade, Serbia
October 12-16, 2021

PROGRAMME & ABSTRACT BOOK

IMPORTANT NOTICE:

The abstracts included in this book are the proceedings of the 13th European Multicolloquium of Parasitology, as provided by the authors. The Organizers of the EMOP2021 are not responsible for the scientific content of the abstracts.

Editors:
Ivana Klun & Olgica Djurković-Djaković

Layout and prepress:
Olivera Popović

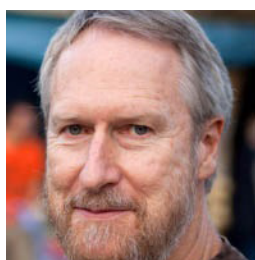


Organizer:
SERBIAN SOCIETY OF PARASITOLOGY
Belgrade, Serbia, Bulevar oslobođenja 18/I, rm. 111
E: dps@imi.bg.ac.rs, T: +381 11 2685 788, ext. 106, W: www.parazit.org.rs



EMOP2021 Secretariat:
CONGREXPO d.o.o.
Belgrade, Serbia, Svetozara Markovića 81/5
W: www.congrexpo.co.rs

EDITORIAL



Thomas Romig

President of the EMOP 2021
Scientific Committee

European Federation of
Parasitologists



**Olga Djurkovic-
Djakovic**

President of the
EMOP2021 Organizing
Committee

Serbian Society for
Parasitology

Dear colleagues,

On behalf of the Organizing Committee, the Serbian Society for Parasitology and the European Federation of Parasitologists (EFP), it is our great pleasure to welcome you to the 13th European Multicolloquium of Parasitology (EMOP XIII, Belgrade, Serbia, 12-16 October 2021). Here, you will find the programme and the abstracts of all communications to be presented.

At the heart of this edition of the EMOP is CHANGE. Changes that the world is currently going through, including climate change, migrations of both people and animals, and changes in food habits, favour the persistence and contribute to the re-emergence of parasitic infections at the global level. We tried to capture this in the motto of EMOP 2021, back when it was supposed to be EMOP 2020. The mere fact that this is the first time in its 50-year long tradition that an EMOP has had to be postponed (for more than a year after the originally set dates), speaks even louder about the changes that we are living through. In this case, of course, changes caused by the covid-19 pandemic that has claimed more lives and disrupted life like no other peacetime event in a hundred years.

So, we should all be proud that there will be an EMOP at this time, and that we are meeting, whether on-site or online, to exchange knowledge and ideas, and even share some hugs, or smiles at least. And there is an exciting programme to benefit from, on the latest discoveries and technological developments, tackling major current global issues such as Climate change and parasite re-emergence, Migrations and parasites, Food and Water-borne parasitology, the One Health approach to combatting parasitic diseases, to mention just a few. In addition, because of the geographical position of the host country, developments in the field in the region of South East Europe are under the spotlight.

The number of papers submitted to EMOP 2021 that you can find in this volume may not be as large as would have been expected before the “new normal”. But it has been an endeavour to reach this point, both from us as organizers and from you as participants. Moreover, whatever the programme has lost in quantity may have been made up in quality, since the structure of the conference consists largely of symposia on particular topics organized by leaders in the field, with invited talks by top experts. This means our programme represents not only a rich learning experience, but also an excellent cross-section of current developments and perspectives in the broad field of parasitology in Europe and beyond.

We wish you all a stimulating and fulfilling congress.

SCIENTIFIC COMMITTEE

EFP BOARD

Thomas Romig, President

University of Hohenheim, Germany

Vasile Cozma, 1st Vice-President

University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca Faculty of Veterinary Medicine, Romania

Antti Oksanen, 2nd Vice-President

Finnish Food Authority, Finland

Olgica Djurković-Djaković, General Secretary

University of Belgrade
Insitute for Medical Research, Serbia

Laura Rinaldi, Treasurer

University of Napoli Federico II, Italy

Members-at-large:

Titia Kortbeek

National Institute for Public Health and the Environment, (RIVM), the Netherlands

Bonnie Webster

The Natural History Museum / Imperial College London, UK

Isabelle Villena

University Reims Champagne Ardenne and Hospital Maison Blanche, CHU Reims, France

Pierre Dorny

Institute of Tropical Medicine, Antwerp / Ghent

Albert Marinculic

University of Zagreb
Faculty of Veterinary Medicine, Croatia

Aneta Kostadinova

Bulgarian Academy of Sciences Institute of Biodiversity and Ecosystem Research, Bulgaria/Spain

Carmen Cretu

Carol Davila University of Medicine and Pharmacy, Colentina Clinical Hospital, Bucharest, Romania

Domenico Otranto

University of Bari, Italy

Dušan Lalošević

University of Novi Sad
School of Medicine, Serbia

Edoardo Pozio

Istituto Superiore di Sanità, Rome, Italy

Eskild Petersen

University of Aarhus Institute of Clinical Medicine, Denmark

Frank Katzer

Moredun Research Institute, UK

Gereon Schares

Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health, Germany

Ivona Mladineo

Institute of Oceanography and Fisheries, Split, Croatia

Jean Dupouy-Camet

University Paris Descartes School of Medicine, France

Joke van der Giessen

National Institute for Public Health and the Environment, (RIVM), the Netherlands

Julia Walochnik

Medical University of Vienna Institute of Specific Prophylaxis and Tropical Medicine, Austria

Lucy Robertson

Norwegian University of Life Sciences
Faculty of Veterinary Medicine, Norway

Ljiljana Sofronić-Milosavljević

University of Belgrade
Institute for the Application of Nuclear Energy, Serbia

Maria Antoniou

University of Crete School of Medicine, Greece

Pascal Boireau

Agence Nationale Sécurité Sanitaire Alimentaire Nationale (Anses), France

Peter Deplazes

University of Zurich Vetsuisse Faculty, Switzerland

Pikka Jokelainen

Statens Serum Institut, Denmark

Robert Farkas

University of Veterinary Medicine Budapest, Hungary

Sanjeev Krishna

St George's University of London, UK

Santiago Mas-Coma

Facultad de Farmacia
Universidad de Valencia, Spain

Simone Caccio

Istituto Superiore di Sanità, Italy

Smaro Sotiraki

Hellenic Agricultural Organisation-Demeter, Veterinary Research Institute, Thessaloniki, Greece

Snežana Tomanović

University of Belgrade
Insitute for Medical Research, Serbia

Suzana Otašević

University of Niš
School of Medicine, Serbia

Toni Aebischer

Robert Koch-Institute, Germany

ORGANIZING COMMITTEE

SSP BOARD

Olgica Djurković-Djaković

President

University of Belgrade
Institute for Medical Research

Ljiljana Sofronić-Milosavljević

Vice-President

University of Belgrade
Institute for the Application of Nuclear
Energy

Ivana Klun
Secretary

University of Belgrade
Institute for Medical Research

Zoran Kulišić

University of Belgrade
School of Veterinary Medicine

Vera Nikolić

University of Belgrade
Faculty of Biology

Dušan Lalošević

University of Novi Sad
School of Medicine

Suzana Otašević

University of Niš
School of Medicine

Zorica Dakić

Clinical Centre of Serbia
Microbiology Services

Olivera Bjelić-Čabrilo

University of Novi Sad
Faculty of Sciences

Aleksandra Uzelac

University of Belgrade
Institute for Medical Research

Alisa Gruden-Movsesijan

University of Belgrade
Institute for the Application
of Nuclear Energy

Branko Bobić

University of Belgrade
Institute for Medical Research

Darko Mihaljica

University of Belgrade
Institute for Medical Research

Gorana Veinović

University of Belgrade
Institute for Medical Research

Jelena Sribljanović

University of Belgrade
Institute for Medical Research

Ljiljana Kuruca

University of Novi Sad
Faculty of Agriculture

Miloš Korać

University of Belgrade, School of Medicine
President of the Infectology Section
of the Serbian Medical Society

Nataša Ilić

University of Belgrade
Institute for the Application
of Nuclear Energy

Nataša Miladinović Tasić

University of Niš
School of Medicine

Neda Bauman

University of Belgrade
Institute for Medical Research

Ratko Sukara

University of Belgrade
Institute for Medical Research

Saša Vasilev

University of Belgrade
Institute for the Application
of Nuclear Energy

Slavica Dacić

Institute of Public Health of Serbia
"Dr Milan Jovanovic Batut"

Snežana Tomanović

University of Belgrade
Institute for Medical Research

Stanislav Simin

University of Novi Sad
Faculty of Agriculture

Tijana Štajner

University of Belgrade
Institute for Medical Research

Verica Jovanović

Institute of Public Health of Serbia
"Dr Milan Jovanovic Batut" – Director

Vesna Đorđević

Institute of Meat Hygiene
and Technology – Director

Vesna Lalošević

University of Novi Sad
Faculty of Agriculture

Vladimir Ćirković

University of Belgrade
Institute for Medical Research

SEEDIF1

AN AUTOCHTHONOUS CASE OF FELINE THELAZIOSIS IN NORTH MACEDONIA

Aleksandar CVETKOVIKJ¹, Kristina ATANASOVA¹, Ljubica RASHIKJ¹, Iskra CVETKOVIKJ¹, Jovana STEFANOVSKA¹
¹acvetkovic@fvm.ukim.edu.mk, Veterinary Institute, Faculty of Veterinary Medicine, Ss. Cyril and Methodius University
 in Skopje, Lazar Pop-Trajkov 5-7, 1000 Skopje, Republic of North Macedonia

Background. The Oriental eye worm, *Thelazia callipaeda* (Spirurida: Thelaziidae) is a zoonotic nematode vectored by lacrimophagous drosophilid flies of the genus *Phortica*. The primary hosts are the wild and domestic canids, with natural infections reported in felids, mustelids, and lagomorphs. Domestic dogs and cats are the most important reservoirs of *T. callipaeda* for human infections, although cats are not considered as a typical host because of their cleaning habits.

Material and Methods. Two whitish, filiform parasites were collected from the right eye of a stray cat that was referred to the University Veterinary Hospital at the Faculty of Veterinary Medicine in Skopje in May 2021 with unilateral conjunctivitis and epiphora. After local anesthesia, the parasites were removed, washed in physiological saline solution, fixed in 70% ethanol and sent to the Laboratory for parasitology and parasitic diseases at the Faculty of Veterinary Medicine in Skopje for morphological identification. The parasites were identified by the position of the vulva in females (located in the anterior half of the body and anteriorly to the oesophageal-intestinal junction), and by the number and position of postcloacal papillae (5 pairs on the ventral surface of the body) and spicule shape and size in males (unequal spicules).

Results. The parasites (1 male and 1 female) were identified as *T. callipaeda*. The female was 1.52 cm long with body width of 410 µm, and the male was 1.09 cm long with body width of 380 µm.

Conclusion. To the best of our knowledge, this is the first report of *T. callipaeda* infection in a cat in North Macedonia. The finding indicates that there is a transmission cycle of *T. callipaeda* and that practitioners should include the Oriental eye worm infection amongst the differential diagnosis of ocular diseases in cats.

SEEDIF2

Dirofilaria repens IN DOGS IN SLOVENIA

Aleksandra VERGLES RATAJ¹, Barbara ŠOBA², Tina KOTNIK³

¹Aleksandra.VerglesRataj@vf.uni-lj.si, Institute of Microbiology and Parasitology, Veterinary Faculty, University of Ljubljana, Ljubljana, Slovenia; ²Institute of Microbiology and Immunology, Faculty of Medicine, University of Ljubljana, Ljubljana, Slovenia; ³Small Animal Clinic, Veterinary Faculty, University of Ljubljana, Ljubljana, Slovenia

Background. Until the last decade of the 20th century, dirofilariasis in dogs occurred mainly in southern European countries. The introduction of the Pet Travel Scheme in 2000 contributed to the spread of dirofilariasis by facilitating the movement of infected, microfilarial dogs from endemic areas throughout Europe. The prevalence of *Dirofilaria repens* in dogs in Slovenia has not been studied so far. Therefore, the aim of the present study was to estimate the prevalence of *D. repens* in dogs in Slovenia.

Material and Methods. A statistically representative number of 465 dogs older than one year and born in Slovenia were recruited between April and October 2018. Epidemiological data were collected and blood samples were taken. Real-time PCR was performed on all samples to detect filarioid DNA, and *D. repens*- and *D. immitis*-specific real-time PCRs were performed on positive samples. Blood samples from 446 dogs were tested for *Dirofilaria* spp. using a modified Knott's test. Descriptive statistics were used to characterise the sample.

Results. Three out of 465 (0.64 %) dogs tested positive for *D. repens* by species-specific real-time PCR, whereas *D. immitis* DNA was not detected. Two of the three PCR-positive dogs were also positive in the modified Knott's test. Two of the three positives never travelled outside the country suggesting autochthonous infection.

Conclusion. We conclude that the prevalence of *D. repens* in Slovenian dogs is rather low. Detailed epidemiological mapping of dirofilariasis is important to develop a rational approach to prevention of the disease and thus reduce the risk of human infections. We believe that the results of our study add important data to the European epidemiological map of the disease.