

13th EUROPEAN MULTICOLLOQUIUM OF PARASITOLOGY

emop 20^{XIII}
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changing climate
changing parasites




Programme
& Abstract
Book

Belgrade, Serbia
October
12-16, 2021





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PROGRAMME
&
ABSTRACT BOOK

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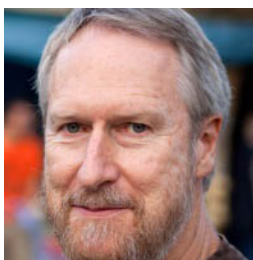


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EDITORIAL



Thomas Romig

President of the EMOP 2021
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**Olga Djurkovic-
Djakovic**

President of the
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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.

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SEEDIF1

AN AUTOCHTHONOUS CASE OF FELINE THELAZIOSIS IN NORTH MACEDONIA

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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

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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.