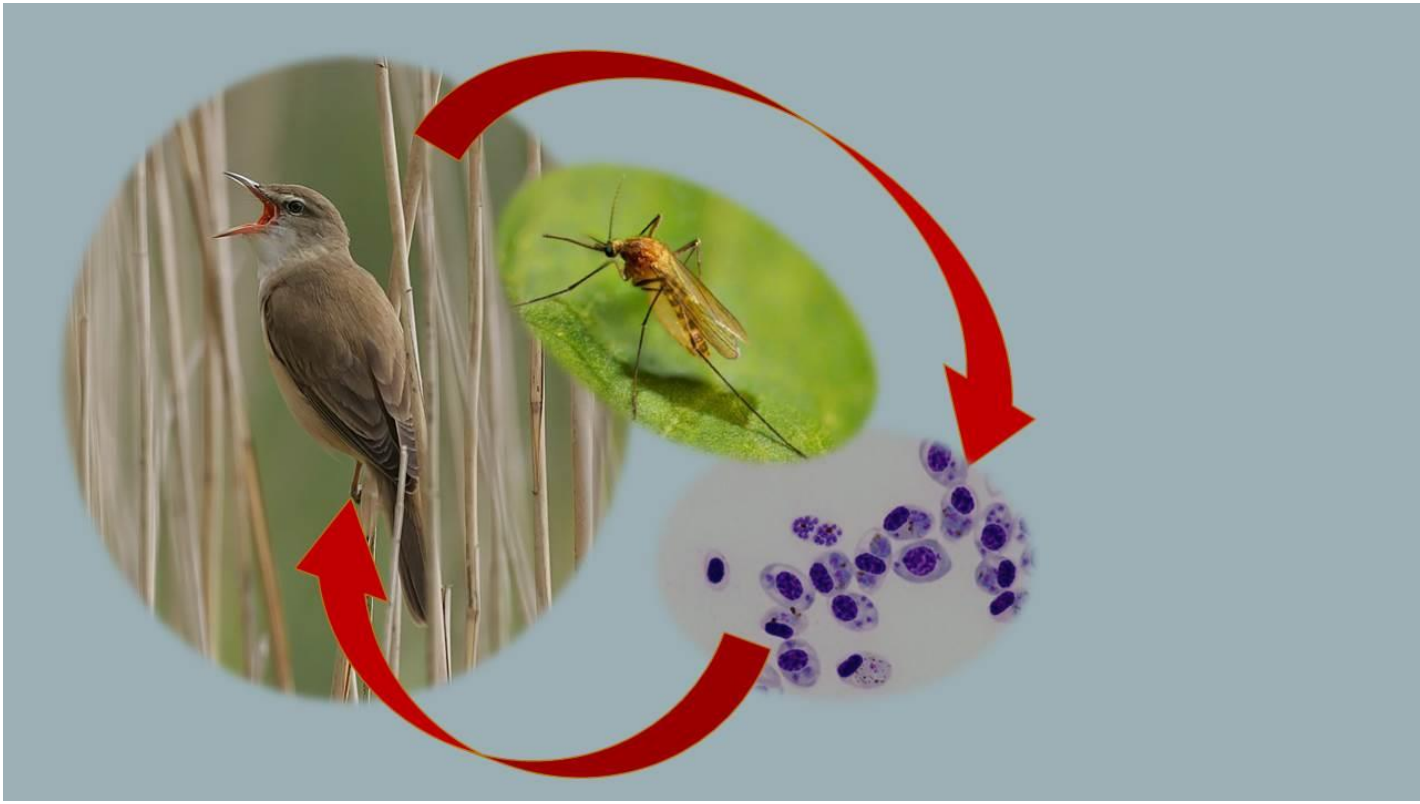
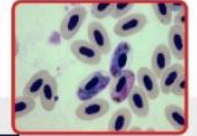


3rd INTERNATIONAL CONFERENCE

Malaria and Related Haemosporidian Parasites of Wildlife
27-29 September 2016
BULGARIA



Conference venue: Arbanashki han hotel

(<http://www.arbanashkihan.com>)



Organizers

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*Nature Research Centre,
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Dr. Ravinder Sehgal
*Department of Biology
San Francisco State University, USA*

Program

Tuesday 27 September 2016

9.30-10.00	Welcome and introduction
Theme 1: Parasite – vector interactions	
10.00-10.40	<u>Invited speaker</u> Gediminas Valkiūnas: <i>Studies of sexual development of haemosporidian parasites: Completing the cycle</i>
10.40-11.00	Rita Žiegytė: <i>Culicoides impunctatus (Ceratopogonidae) is markedly susceptible to avian haemoproteids</i>
11.00-11.30	Coffee
11.30-12.10	<u>Invited speaker</u> Ana Rivero: <i>Heterogeneity of infection outcomes in malaria-infected mosquitoes</i>
12.10-12.30	Nubia Estella Matta: <i>The big challenge: to implicate an avian Haemosporida vector in Colombia</i>
12.30-14.00	Lunch
14.00-14.20	Dovilė Bukauskaitė: <i>Culicoides nubeculosus is an effective vector of avian haemoproteids</i>
Theme 2: Ecology, Conservation and distribution of parasites	
14.20-15.00	<u>Invited speaker</u> Carter Atkinson: <i>Vector-borne parasites and conservation of Pacific island forest birds</i>
15.00-15.20	Paulo Cesar Pulgarin Restrepo: <i>Distributional ecology of avian malaria parasites and their hosts in Papua New Guinea</i>
15.20-15.40	Coffee
15.40-18.40	Microscope workshop - Posters.
19.00-	Dinner

Wednesday 28 September 2016

Theme 2 continued: Ecology, Conservation and distribution of parasites	
9.00-9.40	<u>Invited speaker</u> Robert Ricklefs: <i>Impacts of haemosporidian parasites on the distribution and abundance of their hosts</i>
9.40-10.20	<u>Invited speaker</u> Ravinder Sehgal: <i>Avian haemosporidians: from DNA to Deforestation</i>
10.20-10.40	Farah Ishtiaq: <i>Prevalence and diversity of avian haemosporidians across migrant and resident western Himalayan birds in India</i>
10.40-11.10	Coffee
11.10-11.30	Erika Braga: <i>Habitat modification and secondary succession influence avian haemosporidian distributions in southeastern Brazil</i>
11.30-11.50	Nayden Chakarov: <i>Leucocytozoon-raptor interactions in space and time</i>
11.50-12.10	Leonardo Chapa Vargas: <i>Haemosporidian prevalence and parasitemia in the American kestrel (Falco sparverius) in Central Mexico</i>

12.10-12.30	Leticia Soares: <i>Temporal dynamics of avian haemosporidian parasite assemblages in the West Indies archipelago</i>
12.30-13.40	Lunch
Theme 3: Parasite impact on hosts	
13.40-14.00	Vaidas Palinauskas: <i>Characterisation of virulent Plasmodium elongatum strain (lineage pERIRUB01), with remarks on its diagnostics</i>
14.00-14.20	André Dhondt: <i>Apparent effect of chronic Plasmodium infections on disease severity caused by experimental infections with Mycoplasma gallisepticum in house finches</i>
14.20-14.40	Mikas Ilgūnas: <i>Plasmodium (Giovannolaia) homocircumflexum kills birds</i>
14.40-15.00	Olof Hellgren: <i>Genetic diversity of avian malaria, within and between infections</i>
15.00-15.20	Helena Wester Dahl: <i>To study key host genes in host-pathogen interactions</i>
15.20-15.50	Coffee
15.50-16.10	Alfonso Marzal: <i>Volume and antimicrobial activity of uropygial gland secretions are correlated with malaria infection and survival in birds</i>
Theme 4: Parasite host specificity	
16.10-16.30	Maria Svensson Coelho: <i>Resource predictability and specialization in avian malaria parasites</i>
16.30-16.50	Michaël Moens: <i>Parasite specialization in a unique habitat: hummingbirds as reservoirs of generalist blood parasites of Andean birds</i>
16.50-17.10	Xi Huang: <i>Choosy parasites: infection pattern of a generalist parasite in a multi-host community</i>
17.10-17.30	Jenny Dunn: <i>High diversity of generalist blood parasites in UK columbids and evidence for parasite transmission in UK and Africa</i>
17.30-17.50	Pavel Munclinger: <i>Rare disease specialists: parasite-host associations of avian blood parasites in a tropical forest on the Mount Cameroon</i>
18.30-19.30	Dinner
20.00-	Entertainment: Light and sound Show

Thursday 29 September 2016

08.00-10:30	Excursion – Local birds and culture in the surroundings of Arbanasi
10.45-11.00	Coffee
Theme 5: Molecular and experimental methods	
11.00-11.40	<u>Invited speaker</u> Staffan Bensch: <i>Beyond the genome of Haemoproteus tartakovskyi</i>
11.40-12.00	Janus Borner: <i>Nuclear gene markers for phylogenetic analyses of Haemosporida</i>
12.00-12.20	Karina Ivanova: <i>A discrepancy between morphological and molecular analyses of a haemosporidian parasite in little bitterns (Ixobrychus minutus) from Bulgaria</i>
12.20-13.40	Lunch
13.40-14.00	Rasa Bernotienė: <i>Detection of mixed haemosporidian infections: how to solve the problem?</i>
14.00-14.20	Dimitar Dimitrov: <i>Single sampling underestimate haemosporidian' prevalence: an experimental study of natural relapses</i>

14.20-14.40	Jennifer Stockdale: <i>Use of multiple primer pairs reveals high levels of cryptic co-infection in UK Columbiformes</i>
14.40-15.00	Pavel Zehtindjiev: <i>Experimental approach in haemosporidian studies: past, present and future in Bulgaria</i>
15.00-15.40	Final discussion. Next conference – Funding for network?
15.40-16.00	Coffee
	End of Conference. Concluding remarks

List of Posters (abstracts pages 26-33)

Aneliya Bobeva	<i>What is hidden in the bloodmeal?</i>
Daliborka Stanković	<i>Diversity of haemosporidian parasites in wild birds in Serbia</i>
Elsa Ziegler	<i>A bioinformatics approach to generate genomic contigs of the haemosporidian parasite Polychromophilus sp.</i>
Karina Monzalvo	<i>Haemoparasites in passerine birds from semi-arid areas of Mexico: effect of mine-induced metal pollution</i>
Maria Svensson Coelho	<i>Turnover in avian haemosporidian assemblages: assessing the relative effects of host evolution, habitat, and geographic distance</i>
Martin Marinov	<i>Do mixed haemosporidian infections exert additive effects on the behaviour of a passerine host?</i>
Mihaela Ilieva	<i>Tracking the parasites: Inferring the transmission areas of haemosporidian parasites by tracking their hosts</i>
Mizue Inumaru	<i>Prevalence of avian haemosporidia in injured wild birds rescued in Tokyo and surrounding areas of Japan</i>
Nubia Estella Matta	<i>GERPH: A biological collection of haemoparasites of wildlife</i>
Peter Shurulinkov	<i>On the haemoparasites of Ravens (Corvus corax)</i>
Strahil Peev	<i>New data on diversity, host specificity and transmission areas of haemosporidian parasites in Palearctic-African bird migratory system</i>

On the haemoparasites of Ravens (*Corvus corax*)

Peter Shurulinkov, Nayden Chakarov, Lachezar Spasov, Georgi Stoyanov

A total of 110 Ravens were studied for blood parasites -64 adults in Bulgaria (Dolno Ozirovo, Vratsa district) and 46 nestlings in Germany. For the detection of the blood parasites we used molecular methods and light microscopy. Among the adults we found *Plasmodium*, *Leucocytozoon* and *Haemoproteus* infections with prevalence of 40.6%, 29.7% and 1.5% respectively. The total prevalence of haematozoan infections was 57.8%. A total of 10 haematozoan lineages were detected (three *Plasmodium*, six *Leucocytozoon* and one *Haemoproteus*). Three of the *Leucocytozoon* lineages are new and belong to a clade of corvid parasites. Only three of the studied nestlings showed haematozoan infection with *Leucocytozoon* (prevalence 6.5%). Preliminary data on seasonal dynamics of prevalence of the blood parasites is discussed.

Diversity of Haemosporidian parasites in wild birds in Serbia

^{1,2} D. Stanković and ² M. Raković

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Prevalence and morphology of Haemosporidian blood microorganisms in wild birds are rather well studied across Western Europe from Sweden to Spain, while little has been known about the distribution and the ecology of avian blood parasites across the Balkan Peninsula. Recent data were published just for Bulgaria but research on avian malaria have never been done before in Serbia. We used a nested PCR protocol to examine the diversity of cytochrome b lineages from blood parasites of genera *Plasmodium*, *Haemoproteus* and *Leucocytozoon*. Birds were caught in the breeding season in 2011 at five different localities. In total 85 birds of 27 species and 9 families were examined for the presence of parasites. The overall prevalence of haemosporidians was 33.75%, estimated by blood smear screening. The most common parasite genus was *Haemoproteus*. No differences between juvenile were found, but there was a difference between males and females (18 males from seven species were infected in regards to six females from six species). The composition of parasites varied geographically.