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# PROGRAM & ABSTRACTS



**DOES SYMPATRY INFLUENCE THE PARASITE PREVALENCE AND PARASITE LOAD IN TWO COMPETING LACERTIDS?**

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Parasites are important drivers shaping animal populations by affecting growth, performance, reproductive success and survival. In sympatric related host species, parasites may shape their interspecific interaction and vice-versa - the intensity of parasite infection and parasitemia could be influenced by beforementioned interactions. Members of the genus *Hepatozoon* (Apicomplexa, Adeleorina) are the most common and widely distributed intracellular parasites of lizards. In this work we studied the parasitization patterns of two lizard species, *Iberolacerta horvathi* and *Podarcis muralis*, ranging Slovenia either in sympatry or in allopatry. We used the 18S rRNA gene to confirm parasite identity and identify potential new haplotypes and estimated prevalence and intensity using microscopy. Then, we tested for the effect of host species, geographic region, body size sex and sympatry/allopatry on these parameters. Preliminary results show significant differences in parasite prevalence and intensity among localities, as well as differences in parasite intensity both among localities and host species. This is one of the first studies examining the blood parasites in Slovene reptiles combining microscopy and molecular methods, and as such expands our knowledge on parasite diversity, their possible impact in this region and the interaction patterns between both lizard species. In addition, the study recovers the variation between sympatry and allopatry as a way of understanding coexistence of two lizard species occupying a similar ecological niche.