­Prof. Wolf Blanckenhorn

Editor-in-Chief

Journal of Evolutionary Biology

October 7, 2019

Dear Prof. Wolf Blanckenhorn,

We are pleased to re-submit an original research article entitled “Intensity of infection with intracellular *Eimeria* spp. and pinworms is reduced in hybrid mice compared to parental subspecies” for consideration for publication in the *Journal of Evolutionary Biology*. After thorough revision, we hope that this manuscript is now perfectly suited for publication.

The role of parasitism in regards to hybridization in the European house mouse hybrid zone has been discussed along different contradictory hypotheses and different results were obtained concerning parasite loads. In this manuscript, we show that infection with the pathogenic coccidian parasite *Eimeria* leads to lower parasitic load in hybrid mice than in parental subspecies. We also replicate previous findings of lower parasite loads in hybrids for helminths infection, hereby invalidating the previously hypothesised hybrid susceptibility in this system.

We believe that this manuscript is appropriate for publication by the *Journal of Evolutionary Biology* because it brings light on the role of a main component of hybridization process in an important host-parasite system. Our work adds conclusive new results to a long standing debate on parasite intensities in the house mouse hybrid zone. We expect this to largely settle the argument.

The enclosed work is not under consideration for publication in another journal or book. Submission for publication has been approved by all relevant authors and institutions, and all persons entitled to authorship have been so named. All authors have seen and agreed to the submitted version of the manuscript. The full text excluding abstract, references, tables and figure legends contain 6626 words.

Thank you for your consideration.

Sincerely,

the authors