



REVIEW OF BACHELOR THESIS

Title: Analysis of structure and origin of multiple sex chromosomes in *Leptidea* wood white butterflies

Author: Kristýna Pospíšilová

Opponent: Mgr. Zuzana Majtánová PhD.

The thesis thoroughly presents the state of the art in the study of karyotype evolution and sex chromosomes detection in Lepidopteras. The topic of the thesis is not trivial and author demonstrates her extensive knowledge in this area by the wide range of cited literature. The presentation of the thesis is fluent and I appreciate the choice of English as the language of work. In about 30 pages, the thesis provides a sufficient level of details. Kristýna Pospíšilová also proved the ability to use her knowledge and practically applied various laboratory techniques and advanced cytogenetic methods to fulfil the aims of the study. Despite the fact that working with Lepidopteran chromosomes is difficult because of their size and holokinetic nature, she successfully integrated data from previously designed BAC library and used BAC-FISH for cross-hybridization in closely related species from genus *Leptidea*. The results of this thesis are very promising with the potential to be published in IF journal.

Kristýna Pospíšilová presents interesting and very well composed work which meets and excels the standard requirements imposed on the bachelor thesis, therefore I propose to accept this work and evaluate the grade A.

Defence questions:

1. How many individuals and metaphases have been inspected for the purposes of this thesis?
2. What mechanism could cause the intraspecific variability of RNA and H3 histone genes in *Leptidae* karyotypes?

15. 5. 2018 in Prague

Zuzana Majtánová