



Přírodovědecká fakulta  
Faculty of Science

Jihočeská univerzita  
v Českých Budějovicích  
University of South Bohemia  
in České Budějovice

## STATEMENT OF THE BACHELOR THESIS SUPERVISOR

**Name of the student:** Hana Pechová

**Study program:** Biological Chemistry

**Department/Institute:** Molecular Biology and Genetics

**Thesis title:** Characteristics of the mitochondrial genome of the roundworm

*Oscheius myriophila* (Rhabditidae)

**Supervisor:** PaedDr. Martina Žurovcová, Ph.D.

**Supervisor's affiliation:** Institute of Entomology, Biology Centre CAS, Branišovská 31,  
370 05 České Budějovice

	Point scale <sup>1</sup>	Points
<b>(1) FORMAL REQUIREMENTS</b>		
Formal and graphical quality of the thesis	0-3	3
Ability to work with literature	0-3	3
Language and stylistics	0-3	2
Formal requirements – points in total		
8		
<b>(2) PRACTICAL REQUIREMENTS</b>		
Fulfillment of the aims	0-3	3
Ability to understand the results, their interpretation, and clarity of the results, discussion, and conclusions	0-3	3
Discussion quality – interpretation of results and their discussion with the literature	0-3	2
Experimental difficulty of the thesis, independence in experimental work	0-3	3

<sup>1</sup> Mark as: 0-unsatisfactory, 1-satisfactory, 2-average, 3-excellent.

Contribution of the thesis to the knowledge in the field and the possibility to publish the results (after eventual supplementary experiments) 0-3 3

Practical requirements – points in total 14

POINTS IN TOTAL (MAX. AWARDED)

24

22

**Comments of the supervisor on the student and the thesis:**

The presented study of Hanka Pechová is essential part of an ongoing project conducted in the Laboratory of entomopathogenic nematodes (Inst. of Entomology, CAS), which aims to affirm the phylogeny of the *Oscheius* genus. This genus is quite puzzling due to the presence of both entomopathogenic as well as non-entomopathogenic species, therefore its evolution has very interesting scenario. However, since it is not a model organism, the research on this genus was so far rather restricted.

Hanka worked in our team since the second year of her studies, but as she also participated in lectures abroad, her real time to work in the laboratory was limited. However, she succeeded in obtaining large amount of data, in fact to the same extent as the regular students. She acquired all the essential laboratory skills in a very short time, which soon allowed her to work independently. Her dedication, patience and hard work were excellent. The only real obstacle she did not overcome was the well-known difficulty in sequencing those parts of the mitochondrion, which have very high AT content and in many similar studies remain either unresolved or are finished only after a much more extensive work. She also learned all the required programs for the biostatistical analysis of her data, which again she conducted very well with only a few consultations. Her original results are therefore great input for our project, and will be important part of the upcoming publication.

**Conclusion:**

**In conclusion, I recommend the thesis for the defense.**

**In České Budějovice date June 16<sup>th</sup>, 2017.**

*M. Švachová*  
.....

signature