



Přírodovědecká
fakulta
Faculty
of Science

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

STATEMENT OF THE BACHELOR/~~DIPLOMA~~* THESIS REVIEWER

Name of the student: Michaela Beňová

Thesis title: Effect of adipokinetic hormone on activity of digestive enzymes in *D. melanogaster*

Supervisor: prof. RNDr. Kodrík Dalibor, CSc.

Reviewer: RNDr. Andrea Bednářová, Ph.D.

Reviewer's affiliation: Institute of Entomology, Biology Centre CAS, Department of Biochemistry and Physiology, Laboratory of Insect Physiology, Branišovská 1160/31, 370 05 České Budějovice, Czech Republic

	Point scale ¹	Points
(1) FORMAL REQUIREMENTS		
Extent of the thesis (for bachelor theses min. 18 pages, for masters theses min. 25 pages), balanced length of the thesis parts (recommended length of the theoretical part is max. 1/3 of the total length), logical structure of the thesis	0-3	3
quality of the theoretical part (review) (number and relevancy of the references, recency of the references)	0-3	3
Accuracy in citing of the references (presence of uncited sources, uniform style of the references, use of correct journal titles and abbreviations)	0-3	3
Graphic layout of the text and of the figures/tables	0-3	3
Quality of the annotation	0-3	3
Language and stylistics, complying with the valid terminology	0-3	2
Accuracy and completeness of figures/tables legends (clarity without reading the rest of the text, explanation of the symbols and labeling, indication of the units)	0-3	3
Formal requirements – points in total		20

(2) PRACTICAL REQUIREMENTS

Clarity and 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 the results and their discussion with the literature (absence of discussion with the literature is not acceptable)	0-3	3
Logic in the course of the experimental work	0-3	3
Completeness of the description of the used techniques	0-3	3

* Choose one

¹ Mark as: 0-unsatisfactory, 1-satisfactory, 2-average, 3-excellent.

Quality of experimental data presentation	0-3	3
The use of up-to-date techniques	0-3	2
Contribution of the thesis to the knowledge in the field and possibility to publish the results (after eventual supplementary experiments)	0-3	3
Practical requirements – points in total		26
POINTS IN TOTAL (MAX/AWARDED)		48 (46) ²

Comments of the reviewer on the student and the thesis: The work conducted by the student is excellent, however, the write-up could have been improved. Despite this, the student has done a commendable job of conducting the experiments as well as interpreting the results in a logical manner.

Suggestions and questions, to which the student has to answer during the defense.

Mistakes, which the students should avoid in the future:

1. I noted that whole body homogenates were used instead of isolating the gut of the insects. I understand the difficulty of this procedure in the larval stages, however, in adults at least, an attempt should have been made to isolate the gut and compare the activity of digestive enzymes vs whole body homogenates. If they were not significantly different, then it should provide a rationale for using whole body homogenates.
2. What was the basis for investigating Adenosine in digestive processes? Are there any available literature or is there any indirect evidence of adenosine having an impact on digestive processes?
3. Both AKH and adenosine have been implicated in response to stress. In this work the main theme has been to investigate their roles in digestion. Is there any manner in which an experimental stress paradigm could have been incorporated into the experiment especially with relation to diet and digestion?
4. Based on the results, there does not seem to be a strong indication of influence of adenosine on digestive enzymes. However, was growth and development affected in individuals with AdoR-deficiency compared to their isogenized wild-type counterparts?
5. What was the growth phenotype of the double mutants? E.g. days to pupation?

Conclusion:

In conclusion, I

recommend / ~~do not recommend~~*

the thesis for the defense and I suggest the grade 1.³

In Ceske Budejovice, date 11/09/2017


signature

² Enter the number of points awarded.

³ You can suggest a grade, which can be modified during the defense based on the presentation. However, if the reviewer is not present at the defense, the grade will not be counted.