



Přírodovědecká
fakulta
Faculty
of Science

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

STATEMENT OF THE BACHELOR THESIS REVIEWER

Name of the student: **Ibidolapo Atinuke Adekoya**

Thesis title: **Role of adipokinetic hormone Pyrap-AKH in insect reproduction**
Supervisor: **prof. RNDr. Dalibor Kodrík, CSc.**

Reviewer: **doc. RNDr. Jan Šula, CSc.**

Reviewer's affiliation: **Entomologický ústav Biologického centra AV ČR, v.v.i.**

	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	2
Graphic layout of the text and of the figures/tables	0-3	3
Quality of the annotation	0-3	2
Language and stylistics, complying with the valid terminology	0-3	3
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		19
(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 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
Experimental difficulty of the thesis, independence in experimental work	0-3	3
Quality of experimental data presentation	0-3	2
The use of up-to-date techniques	0-3	3

* Choose one

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

Contribution of the thesis to the knowledge in the field and possibility to publish the results (after eventual supplementary experiments)	0-3	2
Formal requirements – points in total		25
POINTS IN TOTAL (MAX/AWARDED)	48	44

In the presented bachelor Thesis the author is dealing with the role of Pyrap-AKH and allatostatins in the control of reproduction in the model species of the fire-bug *Pyrrhocoris apterus*. The effect of these hormones was studied through monitoring of vitellogenin level in female haemolymph after the hormonal treatment.

The thesis contains 38 pages of text and figures including the list of 92 used references. The text is divided into seven parts and is well understandable. The Introduction is related to experimental insect, its life cycle, insect hormones and reproduction. This part of thesis is rather wide-ranging and the number of references is correspondingly high. Other parts are much shorter and are more closely related to the subject matter. Experimental procedures and methods used in the work are adequate to the aim of the work and reflect the department orientation on the study of insect hormones. The conclusions emerging from the results of experiments presented in the section “Discussion and Conclusion” are competent and provide interesting data usable for further research. They indicate the inhibitory involvement of AKH and allatostatin in the process of vitellogenesis, the influence of AKH being more influential.

Suggestions and questions, to which the student has to answer during the defense:
page 20, Material and Methods: how many experimental animals were used for the experiments?

Eventual mistakes, which the students should avoid in the future:

- page 8, line 6: word vitellogenin could be written before its abbreviation Vg as it is mentioned for the first time in the text, similarly like in the case of juvenile hormone (JH) or adipokinetic hormone (AKH);
- page 16, line 5: cited work Gäde & Auerswald, 2003 cannot be found in the list of references;
- page 20, line 18: control animals were injected with saline that should contain methanol in the same concentration as experimental animals received;
- page 35: paper of Socha et al. (2001) in the list of references is not cited in the text of the Thesis.

Eventual additional comments of the reviewer on the student and the thesis:

Conclusion:

In conclusion, I r e c o m m e n d
the thesis for the defense and I suggest the grade

In České Budějovice, date June 6, 2014



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signature