



Přírodovědecká
fakulta
Faculty
of Science

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

SUPERVISOR'S STATEMENT ON BACHELOR/DIPLOMA^{*} THESIS

Name of the student: Rudolf Nechvile

Study program: Biological Chemistry

Department/Institute: Department of Chemistry, University of South Bohemia

Thesis title: Cathepsin L of *Sphaerospora molnari* – localisation, function and diagnostic tools

Supervisor: Astrid Holzer

Supervisor's affiliation: Institute of Parasitology, Biology Centre of the Czech Academy of Sciences

	Point scale ¹	Points
(1) FORMAL REQUIREMENTS		
Formal and graphical quality of the thesis	0-3	2,5
Ability to work with literature	0-3	3
Language and stylistics	0-3	3
Formal requirements – points in total		8,5
(2) PRACTICAL REQUIREMENTS		
Fulfillment of the aims	0-3	2,8
Ability to understand the results, their interpretation, and clarity of the results, discussion, and conclusions	0-3	2,7
Discussion quality – interpretation of results and their discussion with the literature	0-3	2,5
Experimental difficulty of the thesis, independence in experimental work	0-3	2,2
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		13,2
POINTS IN TOTAL (MAX/AWARDED)		
	3 (exc)	(21,7)²

^{*} Choose one

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

² Enter the number of points awarded.

Comments of the supervisor on the student and the thesis:

Rudolf Nechvile established laboratory assays and methods to study the presence, quantity and intracellular localization of a cathepsin L from the myxozoan *Sphaerospora molnari*. Using a recombinant protein and a polyclonal antibody he successfully developed protocols for western blot, flow cytometry and immunofluorescence. He also performed a vaccine trial with the recombinant protein and tested the effects of IP injection of the protein to antibody formation and parasite proliferation upon challenge. The amount of work performed is more than sufficient for the report/thesis required for his program. Rudolf initially required some extra time to become familiar with certain laboratory methods but eventually performed his assays independently. He was very active, spent a lot of time in the lab and analysed and visualized all his data himself (statistics, pictures, figure legends, etc.). Apart from some minor typos and figure labelling, the thesis is very well written and was elaborated in less than 2 months, with Rudi's own suggestions and structure of contents for intro and partially also for the discussion. Apart from completing his thesis excellently, Rudi also brought a lot of social interaction and good vibes to the lab, which were especially appreciated during Covid times. I believe Rudi has a bright future in science or technology development ahead and the lab/company who will employ him in the future will definitively benefit from his kindness, openness and community spirit.

Conclusion:

In conclusion, I

r e c o m m e n d

the thesis for the defense.

In Ceske Budejovice date 16.8.2022

signature