Přírodovědecká fakulta
Faculty of Science

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

SUPERVISOR'S STATEMENT ON BACHELOR/DIPLOMA[1]* THESIS

Name of the student: Lisa Pulferer
Study program: Biological Chemistry
Department/Institute: Institute of Chemistry
Thesis title: Occurrence of the cALAs gene in the BCCO Actinomycetes collection and cultivation improvements for the overproduction of secondary metabolites in soil associated Actinomycetes
Supervisor: **Erika Corretto, Ph.D.**
Supervisor`s affiliation: **Biology Centre CAS, Institute of Soil Biology**

	Point scale[2]	Points
(1) FORMAL REQUIREMENTS		
Formal and graphical quality of the thesis	0-3	2
Ability to work with literature	0-3	2
Language and stylistics	0-3	2
Formal requirements – points in total		6
(2) PRACTICAL REQUIREMENTS		
Fulfillment of the aims	0-3	3
Ability to understand the results, their interpretation, and clarity of the results, discussion, and conclusions	0-3	2
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	2
Contribution of the thesis to the knowledge in the field and the possibility to publish the results (after eventual supplementary experiments)	0-3	2
Practical requirements – points in total		11
POINTS IN TOTAL (MAX/AWARDED)	24	17[3]

1* Choose one
2 Mark as: 0-unsatisfactory, 1-satisfactory, 2-average, 3-excellent.
3 Enter the number of points awarded.

Comments of the supervisor on the student and the thesis:

The thesis focused on the investigation of Actinomycetes which produce bioactive secondary metabolites using molecular biology and analytical chemistry techniques. The first part of the work consisted in the screening of the BCCO Actinomycetes collection using PCR for the identification of strains which might produce new manumycin-like compounds. In the second part, Lisa produced metabolic extracts from different cultures of a selected Actinomycete and tested their antibiotic activity.

During her internship, she received training for common microbiology techniques (preparation of growth media, cultivation of microbes, antibiotic assay), molecular biology (PCR, analysis of Sanger sequences, basic phylogenetic analysis) and analytical chemistry (extraction of metabolites, TLC). She also acquired a set of soft skills. She organized her work and time-schedule in order to complete the assigned tasks respecting the planned deadlines.

Despite the difficulties due to the Covid pandemic and related restrictions, Lisa managed to complete her tasks in the laboratory. In her thesis, she presented the results in a cohesive way, discussing and comparing the main findings with what is known from literature and suggesting alternative experiments which might help to answer part of the scientific questions that are still open on this topic.

The obtained results contributed to an advance in the screening of the BCCO collection for potentially new active metabolites.

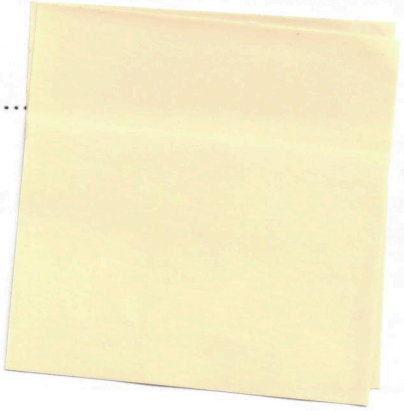
Conclusion:

In conclusion, I

recommend / ~~**do not recommend***~~

the thesis for the defense.

In **České Budějovice** date **03.09.2021**



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