



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:

Study program: Cross-Border Study of Biological Chemistry

Department/Institute: Institute of Chemistry and Biochemistry

Thesis title:

Supervisor: Alica Chroňáková

Supervisor's affiliation: Institute of Soil Biology, Biology Centre CAS

	Point scale ¹	Points
(1) FORMAL REQUIREMENTS		
Formal and graphical quality of the thesis	0-3	3
Ability to work with literature	0-3	3
Language and stylistics	0-3	3
Formal requirements – points in total		9
(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	3
Discussion quality – interpretation of results and their discussion with the literature	0-3	3
Experimental difficulty of the thesis, independence in experimental work	0-3	3
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		14
POINTS IN TOTAL (MAX/AWARDED)	24	23²

* 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:

The thesis is based on cultivation experiments of soil isolates and consortia in order to determine their potential to degrade irbesartan in laboratory conditions. Main aim was to identify microbial strains or consortia able to degrade the irbesartan to low molecular weight residues. To achieve this aim, residual concentration of parent compound and its metabolites were quantified in co-operating laboratory. The experimental work required well organized student which will face the challenge to manage large set of samples to process. From my point of view, Anna made a great job in cultivation, sample management and data evaluation. She was trained mainly in microbiology and is experienced with cultivation of bacteria, fungi and bacterial consortia. Additionally, she gained the experience with molecular biology techniques (DNA extraction, PCR, gel electrophoresis, etc.), statistics and bioinformatics. She learnt processing of next generation sequencing data (16S rRNA amplicons) using dada2 pipeline and adopted non-parametric multivariate statistical tests.

During the stay in our group, she worked with several team members and expressed the talent for team work. Anna worked gradually, meaningfully and purposefully performed tasks and worked very independently, especially in the field of statistics and bioinformatics. In her thesis, she built a comprehensive literature review and she brought the ideas how to present, describe and discuss the results. Main findings are presented in a clear way, and I hope they may contribute to the knowledge about the potential of soil microbial degradation of irbesartan.

Conclusion:

**In conclusion, I
r e c o m m e n d
the thesis for the defense.**

In České Budějovice date 8th June, 2021

