

CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Environmental Sciences

Evaluation of the Final Thesis by Opponent

Thesis Title **Plant adaptations to contamination with metals and metalloids**

Name of the student **Ermengol Ferrer Bustins**

Thesis supervisor **Ing. Zuzana Michálková, Ph.D.**

Department **Department of Environmental Geosciences**

Opponent **Ing. Jindřich Černý, Ph.D.**

Theme of the thesis and its significance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Formulation of objectives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Choice of appropriate methods and methodology used	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work with data and information	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall approach and work with data and information	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Theoretical background of an author	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The structure of paragraphs and chapters	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work with scientific literature (quotations, norms)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skill level of language used	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clarity and professionalism of expression in the work	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Formal presentation of the work, the overall impression	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fulfillment of objectives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Formulation of conclusions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Professional contribution of the work and its practical usage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Summary and key-words comply with the content of the thesis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaluation of the work by grade (1, 2, 3, 4)	1			

Evaluation: 1 = the best

Date 05/16/2018

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Signature of Opponent

Other comments or suggestions:

The bachelor thesis "Plant adaptations to contamination with metals and metalloids" is elaborated in the range of 33 pages (without a literature list) and formally meets the requirements for bachelor thesis.

Objectives are formulated briefly and accurately. Since this is experimental work, it would be appropriate to set the hypotheses. Nevertheless, for bachelor thesis they are not required.

Review of literature consists of chapters that are related to the subject matter and explain it well. The text is written in a comprehensible form, the chapters are logically structured. The author works especially with the scientific literature quite well.

Material and Methods are written in detail and correspond to the objectives and scope of work of the experiment. Results are processed in a clear manner, but interpretation of results is brief and included only the observed values without description of the interrelationship. However, data from experiments are appropriately explained in the Discussion. Citation standards are respected throughout the bachelor thesis.

Questions for thesis defence:

From what / how was made the biochar used in the experimental part of the thesis?

Which biochar properties can be affected by way of its production?

What was the cause of the longest root elongations in all cases of filter paper conditions, as you describe on page 29?

The use of nanoscale zero-valent iron (nZVI) to remediate polluted sites has gained increasing attention in research area. Are there examples (studies) of its practical use in remediation also published?

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