## Posudek vedoucího na diplomovou práci

Autor práce: Bc. Nikola Kořínková

Název práce: ARF family in barley (Hordeum vulgare L.) and their

role in crown-root initiation and development

Vedoucí práce: Dr. V. Bergougnoux-Fojtik

Poř. číslo	Kritérium hodnocení	Body (0-5)
1	Pracovní aktivita	5
2	Zájem o řešenou problematiku (četnost diskusí s vedoucím, znalost relevantní literatury)	5
3	Manuální zručnost	5
4	Pečlivost a spolehlivost	5
5	Vyhodnocování a interpretace experimentálních výsledků	5
6	Samostatnost při sepisování práce	5
	•	20

Max.

## Komentář k práci, připomínky a dotazy

The master thesis of Bc. Nikola Kořinková aimed to identify auxin response factor (ARFs) in barley (*Hordeum vulgarum* L.), a class of transcription factors involved in the auxin-regulated processes. The main focus was to identify ARFs with a putative role in the initiation of crown-roots in barley. The special attention was given to the negative regulators whose knocking-out could be beneficiary to plant in terms of crown-root number and higher ability to use natural resources.

During her master thesis, she had to use English to communicate both with her supervisor and the PhD student with whom she collaborated. She wrote her thesis also in English and showed to be very skillful in this exercise.

After we discussed and determined **together** the different items that should be developed into the review of her thesis, she found the specific literature and was able to extract the important information, being far away from the "plagiarism". I was really nicely impressed by her ability to do such work. Also I consider that this part of her master thesis represents a good basis for a review article.

In the laboratory, Bc.N. Kořinková was autonomous and precise with her work, and searched for the literature allowing the optimization of methods. She was not reluctant to stay long in the lab when required by the experiments. Like all young scientists, she will have to accept that experiments are not always going well and that protocols have to be improved, especially in the field of plant science. In other words, she will have to be more patient with science.

The rigor of Bc. N. Kořinková and her interest for science made that it was a real pleasure to lead her during her master thesis. Indeed, I should use the word "leadership", but rather "collaboration". I'm glad that she decided to continue this adventure with me in the frame of a PhD. Several CRISPR-Cas9 knocked-out plants are waiting to deliver their secret related to ARF-controlled establishment of root system in barley.

## <u>Závěr</u>: práci doporučuji / <del>nedoporučuji k obhajobě</del>.

V Olomouci dne 21.05.2019

Podpis:

Hodnocení:

 $\begin{array}{lll} A-26\text{-}30 & D-11\text{-}15 \\ B-21\text{-}25 & E-6\text{-}10 \\ C-16\text{-}20 & F-5 \text{ a m\'en\~e} \end{array}$