Supervisor assessment

Author of thesis: Meriam Kvashylava

Title of thesis: Proteolytic control of transcriptional repressor in *Arabidopsis thaliana*

Type of thesis: Bachelor

	Evaluation criteria	Grades						
		A	B	C	D	E	F	non-evaluable
1	Interest in the topic (frequency of discussions with the adviser, knowledge of the literature)	x						
2	independence during the thesis writing	x						
3	language and stylistic quality of thesis	x						
4	working activity	x						
5	manual skills, accuracy and reliability		x					
6	self-reliance within the experiments		x					
7	analysis and interpretation of experimental data	x						

Note[1]: if impossible to apply, use "non-evaluable"
Note[2]: mark with "X"
Note[3]: final grade is based only on evaluable (A-F) items
*- select "Bachelor" or "Master of Science"

Grade (A-F)	**A**

Please, attach your comments and questions as well as reasons for your evaluation at the next page (pages)

Conclusion: thesis is recommended to defence

Kumamoto, Japan, 2/08/2022: Yoshihisa Ikeda, Ph.D

Ms. Kvashylava was very keen on working with me in my project as Ms. Kvashylava contacted me years earlier and worked with great enthusiasm to address whether ubiquitin-dependent protein degradation plays a pivotal role in the acquisition of pluripotency. Ms. Kvashylava employed the two different systems; one in an *in vitro* tissue culture and the other intact shoot apical meristem. Ms. Kvashylava took physiological, molecular genetics, and histological approaches to elaborate the impact of CUL3/BPM module to ubiquitinate two transcriptional repressors of AP2/ETHYLENE RESPOSE FACTOR (ERF) family members in the model plant, *Arabidopsis thaliana.* Particular attention is paid to the ERF4 protein expression and its stability by analyzing ERF4-GUS translation fusion reporter. Thanks to Ms. Kvashylava's enthusiasm to contact me earlier, time-consuming genetic analysis of the ERF4 protein reporter expression in the *bpm* triple and in *cul3* double mutants was complete. Despite the fact that Ms. Kvashylava went through torments amid Ukraine crisis, Ms. Kvashylava acquired all the required knowledge and skills for PCR genotypings with CAPS marker analysis included, as well as shoot regeneration assay, histological analysis of ERF4 protein stability. Further, Ms. Kvashylava revealed the possibility that *cul3a* mutants generated by CRISPR/Cas9 in our group might pose the possibility that the single *cul3a* null mutation allele may exhibit yet-to-known phenotypes.

With that, Ms. Kvashylava provided sufficient results both in quality and quantity. Hence, I recommend for the Bachelor defense.