Supervisor evaluation of the PhD thesis of

Alena Vítová

Plant dispersal and establishment

Important factors affecting species composition of meadow communities

The thesis of Alena Vítová deals with two important factors affecting species coexistence in the plant communities – the dispersal limitation, and habitat limitation – because the second factor is rather wide, Alena focused mainly on the limitation in the establishment phase. The thesis are based on several manipulative experiments. The writing of the thesis has taken longer than originally expected, on the other hand, all the experiments were followed for several seasons, and her thesis clearly show that the results of ecological manipulations should be followed for some time to avoid the premature conclusions. With the length of the time, her conclusions are clearly not premature.

The thesis is in fact composed of four papers, with common introduction and common discussion. The four papers are based on four experiments. Three of the experiments were established in the Ohrazeni site, the fourth in the Vrcov, all of them in oligotrophic meadows. In three experiments (the first and the second Ohrazeni experiment, the Vrcov experiment), Alena was the PI, taking care for the experiment establishment and execution, including all the connected logistics, and carried out the recording of the data in the field, in the third Ohrazení experiment, lead by Eva Švamberková, Alena was the co-supervisor, and also considerably helped with the logistics. In two of the paper (I and III), Alena is the leading author, with all the credits. The second paper, is combination of her and Eva's Ohrazeni experiments, and there, both of them contributed similarly to both data analyses and writing. The paper IV is based on Alena's data, but the analyses (which are based on rather complicated spatial statistics) were done by the first author (Pavel Fibich), interpretations are then common endeavor of all the authors.

As a matter of fact, in the Vrcov experiment, Alena managed to get incredible amount of extremely valuable data, which I believe, we will all (i.e. the members of the team) analyze during quite a few coming years. Alena is extremely efficient in field work, and also in organization of experimental work (she is taking care for several last years also for the main Ohrazeni experiment). Now, she managed to compose, in my view rather nice and valuable, thesis, based on three published papers and one paper close to submission. The two papers from the Vrcov experiment (JVS, on line early in Fuctional Ecology) are published in very

respected journals. This demonstrates hwer ability to do independent scientific work and contribute substantially to the ecological knowledge.

As a supervisor, I unequivocally recommend the thesis for the defense.

In České Budějovice, November 25th, 2016

Jan Lepš