

The assessment on doctoral thesis

**Effect of herbivore on growth and reproduction of *Cirsium arvense* in its native and invasive range**

written by Inés Abela Hofbauerová.

Presented thesis consists of general introduction and four chapters including two published peer-reviewed papers and two manuscripts fully prepared for submission. All these texts are well-written in readable scientific English and completed with elegant layout. I would especially appreciate black and white drawing of the study site on the front page by Zita Červinková.

This thesis touches hot topic in contemporary ecology and the authoress undoubtedly choices significant and interesting invasive species for the research. Moreover, the interactions between alien plants and their herbivores are closely watched in the field of biological weaponry applications against invaders. Presented observations and experiments are scientifically valuable and they lead in remarkable results. Inés Abela Hofbauerová has shown miscellaneous desired abilities in the field experiments as well as in the processing of acquired data.

I have several specific questions:

1. There are some alternative concepts on the better performance of the aliens conflicting with EICA. Can you comment Evolutionary Reduced Competitive Ability hypothesis (e.g, Bossdorf et al. 2004) in the context of your thesis?
2. Can you imagine (and comment) outcome of a possible competition experiment with native and invasive populations of *C. arvense*?
3. How influential is damage caused by the insect herbivores in the fitness of *Cirsium arvense* in natural populations?
4. Can be invasive populations of *C. arvense* effectively controlled by such herbivores?
5. Have you any information on closely related species, both phylogenetically and ecologically, which are potentially endangered by invasive populations of *C. arvense*?

6. Can you briefly compare (expected) pattern of presence and intensity of insect herbivores between *C. arvense* and *C. vulgare*, which is also widely invasive in US?

7. Are there some significant differences in this pattern comparing congeneric colonial perennials and biennials?

Generally, I find presented thesis come up to requirements of Ph.D. thesis and recommend accepting this thesis for acquiring Ph.D. title.

In České Budějovice, 10. 9. 2011,

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