

Advisor's evaluation of PhD thesis of Petr Macek: "The role of clonal plants in wetlands".

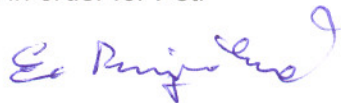
Petr Macek's thesis is composed of six independent chapters representing papers that have already been published (Chapters 2, 3, 4, 5), or are in review (Chapters 6, 7). In addition, Chapters 1(General Introduction) and 8 (General Discussion) tie these seemingly independent topics together by stressing the role and importance of clonality in wetland macrophytes.

Most of Petr's research was conducted as a part of a larger, multidisciplinary study "Linking ecosystem processes and community structure along salinity and nutrient gradients in tropical marshes" and Petr's initial role was that of an "on site" project manager at the study site in Belize. Soon it became clear that Petr has more to contribute than just mundane managerial tasks, and he became actively involved in experimental design and, eventually, data analysis and publication writing. I believe that a part of PhD's training is developing the students' capability to define and design their "own" study, which can be difficult when students are hired to work on existing projects. In our case, Petr either used his experience with local marsh ecosystems and the existing facilities at our field lab to design his totally independent projects (see Chapters 2 and 7), or added a new dimension, specifically, the focus on clonal spread, to ongoing mesocosm and field experiments (Chapters 4 and 6).

Needless to say, Petr has demonstrated his capability to work independently, and has skilfully used diverse field and experimental techniques and innovative approaches to data analysis. He has participated in many international meetings and is becoming a well known young wetland scientist.

It is up to the reviewers to provide more detailed evaluation, ask questions, require clarifications when needed or point out strengths and weaknesses of presented thesis.

I strongly recommend that this PhD thesis is admitted for defense in order for Petr Macek to obtain his doctor's degree.



Eliška Rejmánková

January 3, 2009

Petr Macek:

The role of clonal plants in wetlands

The thesis of Petr Macek deals with the ecology of clonal plants in wetland conditions. The thesis consists of six papers, four of them published in respected journals; for five of the papers, Petr Macek is the first author. The thesis is based on the study of clonal plants in both temperate and tropical wetlands, and demonstrates a wide range of approaches to the study of wetland plants, from ecophysiological experiments executed on a small scale, through field experiments carried out at the scale of the permanent plots in marshes, to observational studies on a landscape scale and finally simulation modeling of spatial spread of a species. In the last paper, the author extended his scope to the role of higher trophical levels on the formation of spatial pattern of plant communities.

The thesis was supervised jointly with Eliška Rejmánková (UC Davis), the PI of the projects in Belize. The applicant worked rather independently and initiatively. The papers clearly demonstrate a wide range of approaches and methods he has acquired during the study. I believe that the published (and submitted) papers clearly demonstrate the applicant's ability to carry out an independent research. The criticism of the work and finding errors, omissions, drawbacks is responsibility of reviewers. From the supervisor point, I appreciate the applicants work and without any hesitation recommend the thesis for the defense.

České Budějovice, December 3, 2008

Jan Lepš

