

Remarks on the PhD dissertation submitted by Miroslav Dvorský:

It is my pleasure to write a letter in support of dissertation submitted by Miroslav Dvorský (known as Čochy to all his friends), who was my PhD student in years 2008-2014. After finishing his MSc in plant systematics and ecology in Olomouc he enrolled for a PhD at the Department of Botany in University of South Bohemia in České Budějovice. At the same time, during spring 2008, he joined our team at the Institute of Botany in Trebon shortly after we launched a new project in Ladakh, NW Himalayas and were seeking for motivated student with a good knowledge of botany and plant ecology as well as ability to conduct research under harsh environment of high mountains. Čochy fulfilled all these demands and soon became a key person in our research, ultimately spending five consecutive summer seasons of 2008-2013 (over 200 days) in Himalayas. By learning the plant species from herbarium vouchers and by preparing a photographic atlas of most common species, he became ready for his first research expedition to Ladakh in summer 2008 that deepened his knowledge on vascular plant and vegetation diversity and eventually resulted in a publication describing principal vegetation types of Ladakh in relations to core environmental gradients. His interest then turned to understanding growth and life form diversities both in clonally and non-clonally spreading species. Discovering unique and fragile environment of subnival zone in eastern Ladakh, where plants grow at the world highest elevations, Mirek research turned to more detailed studies, first one describing biotic interactions between dominant cushion species *Thylacospermum caespitosum* and surrounding plants, the second one base on a dense net of permanent plots for monitoring plant diversity turnover in response to climate changes. Both studies included monitoring microclimate all year round as well as assessment of plant ecophysiological adaptation. Despite the work on his major tasks, Mirek was also helpful in other projects dealing with microbiological soil diversity assessment, plant functional traits, and most recently herbochronological assessment of plant age and growth histories. He is now working together with others on preparation of two books: Anatomical Atlas of Alpine Plants of NW Himalayas and Field Guide of Vascular Plants of Ladakh.

Miroslav Dvorský has submitted a comprehensive PhD thesis attempting to synthesize different aspects of ecology of vascular plants in Ladakh. The thesis consists generally of two parts. The first is the synthetic part unifying the individual studies (General introduction, Aims of the thesis, Summary of results). The core of the thesis is formed by seven standard research reports written in high-quality English, i.e. six papers published and one submitted to international journal. In three research reports Miroslav is the first author. Taken together, Miroslav Dvorský demonstrated his ability to carry out an independent research, to analyze the data, to draw conclusion from the data, and finally, to finish the work by writing a scientific report for an international journal. I have no doubts about the sufficiency of this thesis for obtaining the PhD degree.



Supervisor
Jiří Doležal

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