

Remarks on the Ph.D. dissertation submitted by Zuzana Chlumská:

It is my pleasure to write a letter in support of Zuzana Chlumská's dissertation, whose doctoral thesis I supervised from 2011-2022. We started new research in the Himalayas in 2008 and were looking for a motivated student with an interest in high-mountain ecology and the ability to conduct research in a harsh environment. Zuzana fulfilled these requirements and soon became a key person in our research, eventually spending five seasons in Ladakh in the Indian Himalayas. Her MSc thesis dealt with plant trait adaptations of alpine plants in the Himalayas. After completing her master's degree, she applied for doctoral studies at the Department of Botany and also started working at the Botanical Institute in Třeboň. She was on maternity leave from 2014 to 2019.

In her dissertation, Zuzana began to focus more on the role of non-structural carbohydrates for species survival, range distribution and possible expansion. Despite working on her main tasks, Zuzana also devoted herself to other projects dealing with the ecology of alpine plants in other regions such as the Alps.

Zuzana Chlumská submitted a comprehensive dissertation attempting to synthesize various aspects of the ecology of alpine plants in their highest distribution in the Himalayas. The work generally consists of two parts. The first is a synthetic part uniting individual studies (General introduction, Objectives, Summary of results). The core of the work consists of four standard research reports written in English, i.e. four works published in international journals. In two research reports, Zuzana is the first author. Overall, Zuzana demonstrated her ability to conduct independent research, analyse data, draw conclusions from the data and finally complete the work by writing a scientific report for an international journal. I have no doubts about the sufficiency of this thesis to obtain a Ph.D. degree.



 Doc. Jiří Doležal, Ph.D.
Advisor

October 6, 2022