

Supervisor report on the PhD thesis of Sujan Balami

Balami, S. (2023): Fungi at land use gradient in temperate region of central Nepal. Ph.D. Thesis Series, 2023, No. 3. University of South Bohemia, Faculty of Science, School of Doctoral Studies in Biological Sciences, České Budějovice, Czech Republic, 185 pp.

Sujan started his PhD study in 2017. His topic was a part of the project “Mapping of Pro-organic farming areas in selected six wards of Dolakha District, Nepal” of Global Change Research Institute, where I was part-time employed. He obtained Master Degree in Botany from the Tribhuvan University, Nepal and joined our team with a good knowledge of local plants and traditional microbiological methods. Our first joint task was to overcome bureaucratic obstacles with obtaining a visa, and we continued to develop these skills when transporting material in both directions and coping with Covid restrictions, which significantly affected the course of his study. Sujan's personal task was to learn to disagree, to critically evaluate scientific papers, his own data, supervisor's ideas, and to ask for advice in time. The presented thesis proves that this task was fulfilled.

Sujan is a very good field collaborator, he participated in our project on restored peatlands during his PhD study, attended many excursions and knows basic European mushrooms. He learned statistical methods and continues to help us with data analysis. He routinely processed samples for Sanger sequencing and next generation sequencing, not only for his doctoral thesis, but also for other projects. He participated in teaching mycorrhizae and micromycetes and partly continues to teach at his home university.

His thesis is composed of two published first author papers and two manuscripts. The first manuscript is under Major Revision in Mycorrhiza (IF 3.8), the second submitted to Phytotaxa (IF 1.17). After some training, Sujan is able to go through the entire publication process almost independently and together with abovementioned skills he can be a valuable member of any scientific team. For me, two main conclusions emerge from his work: 1) valuable native communities cannot be easily restored and should be better protected; 2) primary research focused on the diversity and ecology of fungi is irreplaceable, because without knowledge on key components of fungal communities it is impossible to evaluate their changes.

It is my pleasure to recommend Sujan's thesis for defense. I hope he will contribute to the knowledge and protection of the beautiful Nepali mycobiota and will inspire other Nepali students in the study of fungi.

In České Budějovice 24.4.2023

Martina Vašutová