Prof. RNDr. Zuzana Münzbergová, Ph.D., *1977, ORCID ID: 0000-0002-4026-6220

Education: M.Sc. (=Mgr.): Faculty of Science, Charles University, Prague (biology, 1995–2000), Ph.D.: Department of Botany, Charles University, Prague (Plant Ecology, 2000–2004)

Employment history: since 2000: research fellow, Institute of Botany, Czech Academy of Science, Czech Republic. since 2002: research fellow, Department of Botany, Faculty of Sciences, Charles University, Prague. Ass. prof. (Doc.) since 2008, Prof. since 2020.

Overview of activities in the research field in the last 5 years:

In the last 5 years the co-applicant was exploring species adaptations to various environmental conditions including adaptations to changing climate, with two projects dealing with adaptation to climate. A range of studies was also dealing with species genetic diversity and its relationship to various environmental factors. Other studies were dealing with various species traits and their relationship to species phylogeny within various species groups. Over the period, she published 65 papers in journal with IF in total. Out of these 8 papers were dealing with species adaptations, 6 were dealing with species genetic diversity and 7 were dealing with species traits. In the last year she also published 2 papers using eco-metabolomics approach.

Selected publications (look for Mu*bergov* at WOS): 212 WOS publications in total, H-index 36. in 't Zandt, D., Kolaríková, Z., Cajthaml, T. & Münzbergová, Z. (2023) Plant community stability is associated with a decoupling of prokaryote and fungal soil networks. Nature Communications, 14. Rathore, N., Hanzelková, V., Dostálek, T., Semerád, J., Schnablová, R., Cajthaml, T. & Münzbergová, Z. (2023) Species phylogeny, ecology, and root traits as predictors of root exudate composition. New Phytologist, 239, 1212-1224.

Münzbergová Z., Hadincová V., Skálová H. & Vandvik V. (2017): Genetic differentiation and plasticity interact along temperature and precipitation gradients to determine plant performance under climate change. – Journal of Ecology 105: 1358-1373.

Thakur D, Hadincová V, Schnablová R, Synková H, Haisel D, Wilhelmová N, Dostálek T, Münzbergová Z. 2023. Differential effect of climate of origin and cultivation climate on structural and biochemical plant traits. Functional Ecology, 37: 1436-1448.

Yacine Y, Kutáková E, in't Zandt D, Hadincová V, Semerád J, Cajthaml T, Münzbergová Z. 2024. Between- versus within-species variation in plant-soil feedback relates to different functional traits, but exudate variability is involved at both scales. Functional Ecology, 38: 1156-1171.

Previous projects: Project leader of 16 major research projects, which already finished and 2 large running projects. Team member of additional 10 large projects including an international one.

Longer working stays abroad: Ecological & Environmental Change Research Group, University of Bergen – with V. Vandvik (2005, 2006, 2011) – collaboration within the SeedClim project; Dep. Botany, University of Stockholm, Sweden – with J. Ehrlén (2001, 2002, 2004); Dep. Ecology and Evolutionary Biology, U. Michigan, USA – with D. Goldberg (2004); Ramon Science Center, Mitrani Dpt. Desert Ecology, Ben Gurion U., Israel – with D. Ward (1999); University of Nijmegen, Netherlands – with J. van Groenendael (2000)

Presentations at international conferences and foreign research institutes: 8 invited talks and over 50 standard presentations

Other activities: 2008-2011 – Editorial Board Journal of Vegetation Science; 2009-2010, 2013-2016, 2020-2023 –Board Member in Grant Agency of the Czech Republic; Since 2016 – Editorial Board Annals of Botany

Research interests:

Species adaptions to changing conditions and various other ecological factors, determinants of species distribution, interactions of plants with soil biota, evolution of life history traits, invasive plant species, plant population biology, population genetics, plant-animal interactions, ecology of polyploids, landscape dynamics of species, dispersal ecology, conservation biology.

Teaching and Student supervision:

Since 2002 various teaching activities at the Charles University, Prague. Currently teaching Population biology, Conservation Biology, Multivariate Statistics, Methods in Population Biology, Ecology for bachelor students, Field course of Ecology.

PhD. student supervision: 17 finished, 8 running.

Master student supervision: 53 finished, 7 running. Bachelor student supervision: 60 finished, 9 running.

Supervised also 5 foreign postdocs and 11 foreign internship students.