



Ecology Seminar

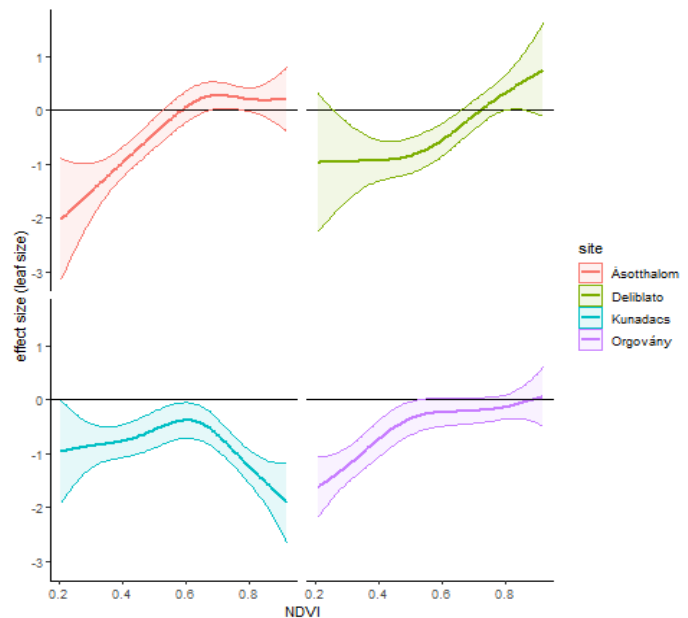
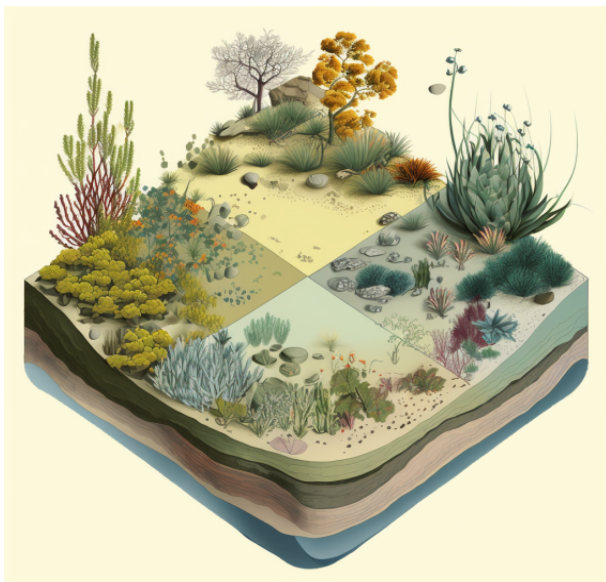


Tuesday, 19.03.2024
16:20h

Zoltán Botta-Dukát

Centre for Ecological Research, Hungary

Can we test the Stress-Dominance Hypothesis (SDH) using trait convergence/divergence patterns?



Using plant traits for detecting assembly rules has become popular in the last two decades. Assembly rules mean a non-random selection of the components of local communities from the regional species pool. With respect to traits, it means lower (trait convergence) or higher (trait divergence) than expected, distinguishing environmental filtering and limiting similarity, respectively. The stress dominance hypothesis (SDH) predicts that in harsher environments, environmental filtering becomes stronger and competition weaker; therefore, in more stressed conditions, we should find higher trait convergence.

In the last about ten years, many of my studies have been related to traits, assembly rules, and environmental filtering. While previous ones more or less support SDH, in the last study (recently accepted for publication in JVS), where we studied the same productivity gradient in four sites, the trends were site-specific. This prompted me to go back to basics and rethink our hypothesis and methods.

Therefore, in the lecture, I will start with the theoretical background of SDH, continue my efforts to improve the methods, show the results of case studies, and finally say some words on my view of the perspectives.

Where? Lecture Hall B2, Building B2, Branišovská 1760