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ÖKOLOGISCHES KOLLOQUIUM

of the Institute of Zoology in person in room 0.024

Wednesday, May 21st, 2025, 01:15 pm



Dr. Damien Finn

Group leader Soil Microbiology, Thünen Institute for Biodiversity, Braunschweig

Host: Prof. Dr. Michael Bonkowski

Microbial biodiversity ecosystem function in soils: theory and application

A *raison d'être* of microbial ecology is to ask why communities 'are as they are and do as they do'. To address such biodiversity ecosystem function (BEF) questions, microbial ecologists have largely applied theory adopted from macroecology, despite fairly clear differences in terms of population sizes and dynamics, or even the notable absence of a fundamental 'unit' to describe biodiversity, i.e., a species concept. This colloquium presentation aims to shine a critical light on several mathematical quirks underlying the theory, interpretation and application of some routinely employed BEF principles to microbial communities. Using soil communities under a year's cultivation of winter wheat as a case study, it will be shown that macroecological BEF concepts do not necessarily hold true for microbial systems. Rather, robust relationships between microorganisms and ecosystem processes are best done from a perspective that considers both the functional biology of microbial taxa and the unique nature of data derived from modern molecular techniques.

Gäste sind herzlich willkommen!
Die Mitarbeiter/innen der Ökologie

→ bei Rückfragen: 470-8242 (Niedeggen)