

Wintersemester 2010/2011

Gebäude GEO I
Hörsaal H6

BayCEER Kolloquium

Vortragsreihe Ökologie und Umweltforschung

Donnerstag 20.01.2011, 16:15 Uhr, H6

Anschließend Postkolloquium mit Bier und Brezeln im Foyer H6

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Do microbe-habitat interactions affect the relationship between microbial diversity and carbon dynamics in soil?

Microbial communities exist and are active in a complex 3-D physical framework which can cause a variety of micro-environments to develop that are more or less suitable for microbial growth, activity and survival. If there is a significant microbial biogeography at the pore scale in soil, then the relationship between microbial diversity and ecosystem function is likely to be affected by micro-environmental variations at the pore scale. Most studies are carried out at scales far greater than the microhabitat (e.g. using 1 to 10 grams of soil) and, de facto, assume that variation at the microhabitat scale is not relevant to understanding C dynamics. In this presentation I will suggest that this is not a wise path to follow. I will show that microbial community structure and C turnover are both related to pore size class, suggesting that the local habitat plays a regulatory role in community development and C dynamics. By using statistical methods, I will show that a better understanding of the relationship between microbial diversity and C dynamics can be obtained if the interactions at the microhabitat scale were considered.

Die Vortragsreihe ist eine interdisziplinäre Plattform zur Information und Diskussion für Studierende, Forschende und Lehrende

Gäste sind herzlich willkommen