Microbial-faunal interactions shaping soil processes



The nematode *Acrobeloides* feeding bacteria (Picture courtesy S. Sela)

Workshop GfÖ Soil Ecology Group

5th to 7th October, 2011 Humboldt-Universität zu Berlin Soils harbour an enormous diversity of organisms, ranging from bacteria, fungi and microalgae to soil animals. The interplay between microflora and fauna is central to ecosystem services, such as bottom up and top down regulation in food webs or mutualistic and antagonistic relationships.

Recent methodological advances allow for analysis of these interactions in unprecedented detail. This workshop brings together soil microbiologists and zoologists in order to discuss innovative concepts and methods on the microbial-faunal interface to prompt a better understanding of soil functioning.

Specific topics addressed are:

- Experimental model systems
- Linking soil properties and biota
- Soil chemical ecology
- Energy channels and food webs

The Workshop will take place at the Humboldt-Universität, Unter den Linden, Berlin-Mitte.

Begin: October 5th 18:00h End: October 7th 18:00h

Many sightseeing spots, such as the Reichstag, the Brandenburg Gate, the Museum Island and the Gendarm Market are within walking distance to the venue.



Humboldt-Universität, Unter den Linden (Picture courtesy H. Zappe)





Second Circular

5th of October – Evening Session

Kick-off: Sébastien Barot (Paris, France)

Finding the principles of soil ecology or bridging the gap between soil ecology and general ecology?

Afterwards: Ice breaker

6th of October - Morning Session "Model organisms in soil ecology"

Lisa Bjørnlund (Copenhagen, Denmark)

Impact of bacterial defense strategies on multitrophic interactions - from test tube to soil

Kornelia Smalla (Braunschweig, Germany)

Cultivation-independent methods to unravel complex interactions in the rhizosphere

6th of October - Afternoon Session "Linking soil properties and biota to functional networks"

Marcus Horn (Bayreuth, Germany)

Unravelling of earthworm-microbe interactions in soil

Tim Urich (Vienna, Austria)

Beech litter degrading microbial communities probed by metatranscriptomics

7th of October - Morning Session "Soil chemical ecology"

Michael Bonkowski (Cologne, Germany)

Microbial food web interactions mediated by signals and toxins in the plant rhizosphere

Ivan Hiltpold (Neuchâtel, Switzerland)

Manipulating belowground tritrophic interactions to enhance biological control of the western corn rootworm *Diabroitica v. virgifera*

7th of October - Afternoon Session "Energy channels and food webs"

Gerlinde de Deyn (Wageningen, The Netherlands)

Fuels and engines under our feet

Katarina Hedlund (Lund, Sweden)

Stable isotopes guide us towards the understanding of multiple interactions in soil food webs

For further information see:

http://www.biologie.hu-berlin.de/forschung/ gruppen_inst/oekologie/wgfoe The workshop structure includes the introduction of the focal topics by invited speakers. This will be followed by discussion in specific section groups and linked together in a joint plenum round.

Contributions to the workshop

Besides the key note talks the workshop is organised as discussion forum. **Poster contributions to the focal topics** by participants are very welcome.

Please register till 31. August 2011.

A **fee** of **30 Euro** is charged covering the cartering during the workshop. This includes the ice breaker.

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