

# Conference on Soil Biota driven Ecosystem Services in European Agriculture

22nd – 23rd October 2019, Thünen-Institute Braunschweig, Germany



**How can adapted agricultural management promote soil biota and how does soil biodiversity feeds back with ecosystem services as benefit for farmers and society?**

<b>Tuesday, 22.10.2019</b>	
9:30	Welcome coffee and registration
10:30	Welcome by the organisers
10:45	<p><b>1<sup>st</sup> plenary session: Soil biodiversity as a companion for farmers</b> Chairwoman: Guénola Pérès (Agrocampus Ouest, France)</p> <p><u>Keynote:</u>  <b>Lijbert Brussaard:</b> Soil Biodiversity for Regenerative Agriculture (Wageningen University &amp; Research, Netherlands)  <b>Birgit Lang:</b> Effects of earthworm activity on bulk density - a meta-analysis (Senckenberg Museum of Natural History Görlitz, Germany)  <b>Giulia Bongiorno:</b> Reduced tillage, but not organic matter input, has increased nematode diversity and food web stability in European long-term field experiments (FiBL, Switzerland)  <b>Maarja Öpik:</b> Plant symbiotic mycorrhizal fungi in agriculture (University of Tartu, Estonia)</p> <p><b>Discussion with the audience</b></p>
13:00	Lunch break (sandwiches)
14:00	<p><b>2<sup>nd</sup> plenary session: Soil biota driven ecosystem services as a societal value</b> Chairman: Stefan Schrader (Thünen Institute, Germany)</p> <p><u>Keynote:</u>  <b>Katharina Helming:</b> Sustainability assessment of agricultural soil management (ZALF, Germany)  <b>Kevin Hoeffner:</b> Do crop rotations including temporary grassland improve soil ecosystem services? (University of Rennes, France)  <b>Pia Euteneuer:</b> Earthworms affect decomposition of soil-borne plant pathogen <i>Sclerotinia sclerotiorum</i> in a cover crop field experiment (BOKU, Vienna)</p>
15:30	Coffee break
16:00	<p><b>Monika Joschko:</b> X-ray CT assessment of soil structure: a tool for monitoring soil biota driven ecosystem services in agricultural soils (ZALF, Germany)  <b>Svenja Meyer:</b> Mesofauna under drought stress – Evidence from two different farming systems (University of Göttingen, Germany)</p> <p><b>Discussion with the audience</b></p>
17:15	<b>Poster pitches</b> of 5 minutes each (supported by 1-2 slides)

	<p><u>Amit Kumar</u>: Incorporating the role of microbial diversity and plant soil feedback effects in agricultural managements (Leuphana University, Lüneburg, Germany)</p> <p><u>Esther Klingenberg</u>: The effect of flower strips on the soil biological community and on nitrogen retention. An observational study in Germany (University of Göttingen)</p> <p><u>Jussi Heinonsalo</u>: Biodiversity effects on farmland carbon sequestration (Project TWINWIN) (Finnish Meteorological Institute FMI, Helsinki, Finland)</p> <p><u>Lea Spelzhausen</u>: Towards an improved understanding of carbon sequestration in grassland soils – the impact of soil fauna (University of Bremen, Germany)</p> <p><u>Mignon Sandor</u>: Exploring biodiversity in Romanian vineyard to promote sustainable management and conservation of biodiversity (University of Cluj, Romania)</p> <p><u>Manuel Anguita-Maeso</u>: Plant genotype, soil and climate as drivers of the olive microbiome composition (Institute for Sustainable Agriculture IAS, Cordoba, Spain)</p> <p><u>Vivien Schwarz</u>: Influence on soil aggregation by mycorrhizal inoculation of maize on a sandy soil (University of Applied Science in Osnabrück, Germany)</p>
17:45	<p><b>Snapshots from the SoilMan project</b></p> <p><u>Christine van Capelle</u>: Suppression of plant pathogens and detoxification by soil biota – below-ground support for healthy arable soils (Thünen Institute, Germany)</p> <p><u>Ilka Schmoock</u>: Effects of tillage intensity in arable land on ecosystem services driven by soil biota (University of Göttingen, Germany)</p> <p><u>Dumitrița Dascălu</u>: Can tillage management induce changes in functional diversity of the soil microbial community? (University of Cluj, Romania)</p> <p><u>Anneke Beylich / Ulfert Graefe</u>: The performance of potworm and earthworm communities at SoilMan sites (Institute for Applied Soil Biology, Hamburg, Germany)</p> <p><u>Astrid Taylor</u>: Effect of tillage on earthworms and their bioturbation activity (SLU, Sweden)</p> <p><u>Jörg Hanisch</u>: Collembolan biodiversity in agricultural fields across Europe as affected by farm-based soil management practices (University of Göttingen, Germany)</p>
18:30	Buffet Dinner
<b>Wednesday, 23.10.2019</b>	
9:30	<p><b>3<sup>rd</sup> plenary session: Future opportunities for soil biota preservation in agriculture</b> Chairman: Jan Bengtsson (SLU, Sweden)</p> <p><b>Keynote:</b></p> <p><b>Martin Potthoff &amp; Martin Banse</b>: How can policy strengthen the synergies between agriculture and soil biodiversity? (University of Göttingen &amp; Thünen Institute, Germany)</p> <p><b>Catherine Milou</b>: The role of collective action at a territorial level in promoting agroecological practices. A case study of a deliberation process between farmers and consumers (Lereps/Qualisol, France)</p>
11:00	Coffee break
11:30	<p><b>Morgane Hervé</b>: Integration of values plurality in the definition of soil management strategy by European farmers (University of Rennes, France / University of Göttingen, Germany)</p> <p><b>Alexandra Langlais</b>: Soil biota preservation in the post-2020 Common Agriculture Policy (CNRS, France)</p> <p><b>Discussion with the audience</b></p>
12:30	<b>Concluding remarks</b>
13:00	Lunch (optional, in canteen of the Thünen Institute)

Organisers of the conference:



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