

	Sunday November 29	Monday November 30	Tuesday December 1	Wednesday December 2	Thursday December 3	
8:00		Registration				8:00
8:30						8:30
9:00		Microbial Life in Contaminated and Anthropogenic Soils	Biodiversity and Functioning of Forest Soils	Biodiversity and Functioning of Agricultural Soils	Microbes in the Changing Environment	9:00
9:30			Coffee			
10:00						10:00
10:30			Coffee			10:30
11:00		Coffee	Biodiversity and Functioning of Forest Soils	Coffee	Coffee	11:00
11:30				Biodiversity and Functioning of Agricultural Soils	Microbes in the Changing Environment	11:30
12:00	Registration	Decomposition and Carbon Cycling		Interactions among Micro- and Macroorganisms	Archeo- and Paleomicrobio- logy / Microbial Forensics	12:00
12:30			Lunch			12:30
13:00		Lunch				13:00
13:30					Closing	13:30
14:00				Lunch		14:00
14:30		Decomposition and Carbon Cycling	Soil Biogeochemistry and Nutrient Cycling			14:30
15:00				Trainbiodiverse – Exploring Soil Biodiversity across Europe		15:00
15:30		Coffee	Coffee			15:30
16:00						16:00
16:30		Coffee	Soil Biogeochemistry and Nutrient Cycling			16:30
17:00	Opening	Interactions among Micro- and Macroorganisms		Coffee		17:00
17:30	Keynotes				Trainbiodiverse – Exploring Soil Biodiversity across Europe	17:30
18:00		Poster Session	Poster Session			18:00
18:30		I	II			18:30
19:00						19:00
19:30						19:30
20:00	Welcome reception			Conference dinner		20:00
20:30						20:30
21:00						21:00
21:30						21:30
22:00						22:00

SUNDAY, 29 NOVEMBER 2015

12:00-16:30 Registration

Opening session (Michael Schloter)

16.45 **Welcome** - Petr Baldrian

17:15 **Keynote:** Michael Wagner: Nitrification revisited: The discovery of Comammox, cyanate-degrading nitrifiers, and reciprocal feeding

18:00 **Keynote:** Francis Martin: Unearthing the Roots of Fungal Symbioses

19:00-21:30 Welcome reception

MONDAY, 30 NOVEMBER 2015

8:00-11:00 Registration

Microbial Life in Contaminated and Anthropogenic Soils (Christoph Tebbe)

8:45 Michael Schloter: Reconstruction of microbial nutrient cycles in soil using metagenomic approaches (Invited lecture)

9:10 Timothy Vogel: Microbial Social Networks in Contaminated Soils (Invited lecture)

9:35 Tomáš Cajtham: Insights into ecology during microbial bioremediation as assessed through advanced techniques – case studies (Invited lecture)

10:00 Matthias Kästner: Degradation of ¹³C-labelled pyrene in soil-compost mixtures and farmyard fertilized soil – turnover mass balances and community analyses

10:15 Jennifer Wiltshire: Microbial community dynamics in the rhizosphere of a heavy-metal hyper accumulator

10:30 Anja Worrlich: Impact of mycelia-like dispersal networks on bacterial spatiotemporal dynamics linked to biodegradation at varying water potentials

10:45 Antonios Michas: Soil - sediment microbial community adaptation due to a long history of oil contamination

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11:00 Anne Winding: Biochar for soil carbon sequestration and P fertilization: effects on microbes and fauna

11:15-11:45 *Coffee*

Decomposition and Carbon Cycling (Christoph Tebbe)

11:45 Paolo Nannipieri: The microbial origin of humic substances (Invited lecture)

12:10 Ellen Kandeler: Microbial Colonisation and Resource Partitioning in Agricultural Soils (Invited lecture)

12:35 Björn Lindahl: Ectomycorrhizal fungi drive humus decomposition in boreal forest (Invited lecture)

13:00-14:30 *Lunch*

Decomposition and Carbon Cycling (Lynne Boddy)

14:30 Rubén López-Mondéjar: What do they eat? Exploring the substrate-specificity of microbial communities in the decomposition of C sources in a forest soil

14:45 Annemieke van der Wal: Similar and contrasting patterns of natural fungal community assembly during initial decay of coniferous and broadleaf tree logs: an experimental common garden approach

15:00 Alexander Guhr: Redistribution of soil water by saprotrophic fungi enhances carbon mineralization

15:15 Ryan Williams: Elucidating microbial drivers of decomposition and the carbon cycle through a co-occurrence framework

15:30 Anders Tunlid: Spectroscopy and transcriptomics provide novel insights into soil organic matter decomposition mechanisms in ectomycorrhizal fungi

15:45 Pankaj Trivedi: Microbial regulation of carbon cycle: evidence from gene-enzyme relationship

16:00 Edith Hammer: Mycorrhizas: Pipeline or Director of Belowground C Fluxes?

16:15-16:45 *Coffee*

Interactions among Micro- and Macroorganisms I (Lynne Boddy)

16:45 Angela Sessitsch: The Hidden World Within Plants: Ecological Considerations and Functioning of Microbial Endophytes (Invited lecture)

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- 17:10 Jan Frouz: The effect of soil fauna in decomposition activity of soil microflora (Invited lecture)
- 17:35 Julia Stevens: Recruitment of a beneficial rhizosphere community by the common dandelion (*Taraxacum officinale*) from different soil types
- 17:50 Max-Bernhard Ballhausen: The sapro-rhizosphere concept: Bacteria as secondary consumers of plant-derived carbon
- 18:05-19:45 **Poster session I** (all posters with ODD numbers)

TUESDAY, 1 DECEMBER 2015

Biodiversity and Functioning of Forest Soils (Jan Dirk van Elsas)

- 8:45 Petr Baldrian: Forest microbiome - diversity, functioning and dynamics (Invited lecture)
- 9:10 Lynne Boddy: Giants of the soil microbial world: foraging cord-forming fungi (Invited lecture)
- 9:35 Martin Hartmann: A decade of irrigation transforms the soil microbiome of a semi-arid pine forest
- 9:50 Christina Hazard: Genotypic Diversity Matters: Examining the diversity-ecosystem function relationship with ectomycorrhizal fungi
- 10:05 Fabian Bergkemper: Phosphorus depletion in forest soils shapes bacterial communities towards phosphorus recycling systems
- 10:20-10:50 *Coffee*
- 10:50 David Myrold: Microbial Community Response to Timber Harvest (Invited lecture)
- 11:15 Leho Tedersoo: Tree diversity and sampling effects on soil fungi, protists and meiofauna as revealed by multiplex ITS metabarcoding (Invited lecture)
- 11:40 Hui Sun: Microbial community shifts in structure and potential function across a boreal forest fire chronosequence
- 11:55 Eva Weber: Unravelling the ecological function of abundant but uncultivated Thaumarchaeota in acidic forest soils

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12:10 Katerina Soldanova: Can we keep using soil ribosomal RNA as indicator of microbial activity?

12:25-14:00 Lunch

Soil Biogeochemistry and Nutrient Cycling (Paolo Nannipieri)

14:00 James Prosser: Bacterial ammonia oxidisers vs. archaeal ammonia oxidisers: who wins in soil, when and why? (Invited lecture)

14:25 Søren Sørensen: The communal gene pool in soil (Invited lecture)

14:50 Sara Hallin: Niche partitioning among N₂O reducing microorganisms and their importance as N₂O sinks

15:05 Dagmar Woebken: Combining stable isotope labeling experiments and single-cell analysis techniques to detect active microorganisms in soil

15:20 Constance Roco: The trajectories of denitrifier structure and function demonstrate remarkable differences in soil with a legacy of anoxic spells versus constant oxic conditions

15:35-16:15 Coffee

16:15 Jan Dirk van Elsas: The soil fungal-bacterial interactome - Mechanisms of interaction, with special emphasis on *Burkholderia terrae* (Invited lecture)

16:40 Jan Jansa: Arbuscular mycorrhizal fungi proliferate in patches of soil enriched with N-containing organic compounds

16:55 Marie Spohn: Do microbial carbon use efficiency (CUE) and the mean residence time (MRT) of microbial biomass depend on soil stoichiometry?

17:10 Natalie Lim: Regulation of nitrite concentrations in acidic and neutral pH soils by a combination of chemistry and complex bacterial community regulation: A study of kinetics and transcriptomics

17:25 Gu Feng: AM fungal hyphae exudates can prime a bacterium mediated phytate mineralization in hyphosphere

17:40 Joana Falcao Salles: Alien escape: impacts of bacterial invasions on soil microbial communities

18:00-19:40 **Poster session II** (all posters with EVEN numbers)

WEDNESDAY, 2 DECEMBER 2015

Biodiversity and Functioning of Agricultural Soils (Jan Frouz)

- 8:45 Christoph Tebbe: Microbiology of soil primary organo-mineral complexes and particulate organic matter (Invited lecture)
- 9:10 George Kowalchuk: Links between patterns of soil microbial diversity and sustainable soils (Invited lecture)
- 9:35 Michael Bonkowski: The diversity and functions of protists in soil: problems and progress (Invited lecture)
- 10:00 Dror Minz: What does the microbiome tell us about life in the plant root zone?
- 10:15 Wietse de Boer: Soil Volatile Organic Compounds: Microbial Competition Tools with High Potential for Control of Root-Infecting Pathogens
- 10:30 Germán Bonilla-Rosso: Evolution and Distribution Patterns of Nitrite Reductase (*nirK/nirS*) in Soil Metagenomes suggest Functional Differences Between Lineages
- 10:45 Frances Jones: The diversity of free-living, non-diazotrophic *Bradyrhizobium* from contrasting soils
- 11:00-11:30 *Coffee*
- 11:30 Zhong Wei: Biodiversity of synthetic microbial communities determines disease suppression
- 11:45 Gera Van Os: An indicator for disease suppression: linking soil chemistry to microbiology using dissolved organic carbon fractionation
- 12:00 Ameni Bahroun: Protozoa induce soil suppressiveness against *Fusarium* wilt

Interactions among Micro- and Macroorganisms (Jan Frouz)

- 12:15 Marc-André Selosse: Life strategy and life cycle of *Tuber melanosporum*: a pioneer hermaphrodite with high spore bank and functional dioecism (Invited lecture)
- 12:40 Mari Moora: Arbuscular mycorrhizal fungal communities: global and local patterns and their potential drivers (Invited lecture)
- 13:05 Aurelie Deveau: From mutualism to antagonism: iron acquisition during soil microbial interactions

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13:20 David García de León Hernández: Can arbuscular mycorrhizal fungi drive vascular plant secondary succession in alvar grasslands?

13:35-15:00 *Lunch*

Trainbiodiverse – Exploring Soil Biodiversity across Europe (Søren Sørensen)

15:00 Søren Sørensen: Introduction to TRAINBIODIVERSE

15:12 Anne Schöler: DNA extraction methods have little impact on microbial community composition as assessed by amplicon sequencing

15:24 Barbara Bahnmann: Fungal communities across a mixed temperate forest: Are local site properties the most influential or does whose your neighbour matter?

15:36 Claudia De La Cruz Perera: Plasmid community adaptation in long-term copper contaminated soil as revealed by a comparative mobilome approach

15:48 Valentina Imparato: Dynamics of microbial communities in pre-exposed and pristine soils in response to high concentration of biochar

16:00 Inês Nunes: Coping with copper: Soil active bacterial communities following 100 years of exposure

16:12 Samuel Jehan Auguste Jacquinod: TBD

16:24 Irshad Ul Haq: Motility, stress responses and nutrients acquisition revealed by transcriptional profiling of *Burkholderia terrae* upon confrontation with a fungal host

16:36 Jean-Sebastien Beaulne: Large Scale Spatial Analysis of Bacterial Communities in Lake Sediments, the Role of Physico-Chemical Parameters, Spatial Distance, Land Cover and Tropical Storms

16:48 João Raimundo: Disentangling fine soil fauna-microbial interactions in mediating key soil processes under different land-use intensity systems and climate change scenarios

17:00-17:30 *Coffee*

17:30 Laura Sanguino : Using CRISPRs to learn about virus-host interactions in the environment

17:42 Maria de Vries: Phylogenetic and taxonomic diversity of glycoside hydrolase family 5 and 48-cellulase genes in agricultural soil

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- 17:54 Salvador Lladó: Are the most abundant bacteria real key players in forest soil processes? A multi-omics approach
- 18:06 Shamina Pathan: Seasonal variation and distribution of total and active microbial community of β -glucosidase encoding genes in coniferous forest soil
- 18:18 Stephanie Jurburg: Autogenic succession in the soil microbial community
- 18:30 Susana Santos: Effects of land use on soil ciliate diversity
- 18:42 Sara Gallego: TBD
- 18:54 Divyashri Baraniya: Proteolytic soil communities and protease activity in rhizosphere of maize plants with different Nitrogen Utilizing Efficiencies(NUE)
- 19:15-22:15 *Conference dinner*

THURSDAY, 3 DECEMBER 2015

Microbes in the Changing Environment (George Kowalchuk)

- 8:45 Erland Bååth: Bacterial growth responses to drying/rewetting and freezing/thawing – a tale of two patterns (Invited lecture)
- 9:10 Christa Schleper: Zooming in on the Functional Heterogeneity of Ammonia Oxidizing Archaea in Arctic Soils (Invited lecture)
- 9:35 Kornelia Smalla: Plasmid-mediated adaptation of soil bacteria to pollutants (Invited lecture)
- 10:00 Johannes Rousk: A case-study for traits-based theory and prediction in microbial ecology: colonisation of sterilised soils across a pH gradient
- 10:15 Tim Urich: Metabolic and trophic interactions modulate methane production by arctic peat microbiota in response to warming
- 10:30 Christian Poll: Impact of climate change on carbon cycling and soil microorganisms in an arable ecosystem
- 10:45 Marc Buée: Ectomycorrhizal and non-symbiotic fungi respond differentially to climatic parameters: what is the link with host susceptibility to climate change?
- 11:00-11:30 *Coffee*
- 11:30 Jiří Bárta: Vulnerability of cryoturbated carbon to climate change

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- 11:45 Belinda Ferrari: Metagenomic insights into microbes living in the cold, extreme polar desert soils of Eastern Antarctica
- 12:00 Mark Anthony: Plant invasion (garlic mustard; *Alliaria petiolata*) alters fungal community composition, increases fungal diversity, and shifts dominant fungal trophic strategy

Archaeomicrobiology, Paleomicrobiology and Microbial Forensics (George Kowalchuk)

- 12:15 Bruce Budowle: Maturation of the Field of Microbial Forensics (Invited lecture)
- 12:40 Jeremy Austin: Predicting the origin of soil evidence: high throughput eukaryote sequencing and MIR spectroscopy applied to a crime scene scenario (Invited lecture)
- 13:05 Sandrine Demaneche: Microbial Soil Community Analyses for Forensic Science - Application to a Blind Test

13:20-14:00 Conference closing

LIST OF POSTERS

Decomposition and Carbon Cycling

90. Tobias Arnstadt - Log decay of *Fagus sylvatica* in temperate forests and the significance of lignin modifying enzymes for the degradation process
91. Chris Bamminger - Divergent effects of pyrochar and hydrochar on greenhouse gas emissions and microbial abundances in an arable soil
92. Andrea Burešová - Composition and activity of microbial community during decomposition of plant litter on two contrasting localities
93. Juliana Conceição - The management system can influence the physiological function and social interaction of phosphate solubilizing bacteria isolated rhizosphere of *Carica papaya* L.
94. Ivana Eichlerová - Decomposition traits and enzyme production of saprotrophic fungi are shaped by the combination of their ecophysiology and taxonomy
95. Lia del Pilar Fernández - Soil bacterial diversity from different animal settlements in maritime Antarctica
96. Damien Finn - Carbon and nitrogen co-metabolism and microbial nitrogen-mining both determine the extent of plant material decomposition in four Australian pasture soils.
97. Dimitrios Floudas - Evolutionary aspects of atromentin synthesis genes in Agaricomycetes
98. Diana Navrátilová - Spatial heterogeneity of decomposition and fungal community composition within single *Quercus petraea* leaves
99. Kevin Geyer - A comparison of methods for measuring the efficiency of microbial metabolism
100. Ton Gorissen - Uniformly ¹³C-Labelled Biomass Tracers - Advances in ¹³C-Techniques tracing changes in soil microbial processes and populations
101. Petra Havlíčková - Effects of plants on the structure, function and diversity of bacterial communities
102. Jussi Heinonsalo - Evidences on the ability of mycorrhizal genus *Piloderma* to use organic nitrogen and deliver it to Scots pine
103. Vincent Herve - Ecology and diversity of oxalotrophic bacteria - an in silico analysis
104. Björn Hoppe - Fungal functional diversity and enzyme activity patterns in decaying logs of 13 temperate tree species in an in situ decomposition experiment
105. Aicha Asma Houfani - Enzyme activities of aerobic (hemi)cellulolytic bacteria isolated from Algerian soils and compost
106. Dominika Chmolewska - Cellulose was decomposed faster in fallow soil than in meadow soil because of a quicker start of the process
107. Sarah Johnston - Fungus-Bacteria Interactions in Decomposing Wood
108. Grit Kabiersch - Detection of organotin compounds and degradation by litter-decomposing fungi
109. Katharina Keiblinger - Efficacy of biochar and compost on remediation of copper contamination in vineyard soils - effects on soil microbiology

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110. Harald Kellner - Fungal research on an artificial deadwood decomposition experiment in the German Biodiversity Exploratories
111. Jaroslav Kukla - The influence of traditional agriculture on soil organic matter in tropical ecosystems of Papua New Guinea
112. Iuliia Kyiashchenko - The effect of soil fertility on fungal communities, enzyme activities and soil carbon dynamics in unmanaged forests
113. Sabrina Leonhardt - Fungal extracellular enzyme activity and biomass in coarse woody debris of 13 tree species in the early phase of decomposition.
114. Katya Litova - Studies on biodegradation of naphthalene and anthracene by *Aspergillus glaucus* strain isolated from Antarctic soil
115. Ashish Malik - Microbial communities' fungal to bacterial dominance alters carbon cycling in soil
116. Tomas Martin-Bertelsen - Towards linking fungal genes to chemical spectra from soil organic matter using machine learning
117. Tijana Martinović - Structure of microbial communities in the environmentally exposed construction wood samples of different species
118. Itamar Melo - Isolation and Screening of Highly Cellulolytic *Trichoderma* spp. from the Amazon Rainforest
119. Sophie Mieszkin - Effect of wood extractives on wood-degrading microorganisms and importance of the ecological niche
120. Karolin Müller - Turnover of Microbial Carbon in the Detritosphere
121. Cesar Nicolas Cuevas - Organic N decomposition by fungal community under fertilized spruce forest
122. Naoise Nunan - Carbon dynamics in Amazonian podzols under climate change
123. Michiel Op De Beeck - Soil organic matter degradation by ectomycorrhizal fungi
124. Tim Philpott - Fungal decomposition of fine roots in response to variable retention silviculture
125. Sebastian Preusser - Reciprocal Soil Transfer Experiments Improve the Understanding of Biological Regulation of Subsoil C-cycling
126. Salvador Rodríguez Zaragoza - Recovering of soil protozoan trophic groups after a strong pulse of hydrocarbon contamination
127. Mikhail Semenov - DNA-based determination of soil microbial biomass carbon under conditions of restricted applicability of substrate-induced respiration and fumigation-extraction
128. Sarker Mohammad Shakil - Characterization of Fe³⁺ reductants secreted by the closely related ectomycorrhizal fungus *Paxillus involutus* and the saprotrophic fungus *Hydnomerulius pinastri* during Fenton-based decomposition of organic matter
129. Ana Margarida Soares - Bridging the priming effect into aquatic systems - Primary producer-C stimulates the fungal decomposition of submerged litter
130. Florian Strasser - Influences of carbon substrates and nitrogen availability on microbial-mediated cellulose degradation in an Austrian beech forest soil
131. Lucie Štercová - Fungal biodiversity of wood decomposing species in national nature reservation of Salajka
132. Rodrigo Taketani - Litter decomposition in mangroves - the role of microbes revealed by DNA and mRNA sequencing

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133. Aloysius Teo - Using teabags to estimate decomposition rates across primary and secondary tropical forests, and investigating the functional role of termites
134. Vojtěch Tláškal - Linking deadwood age with inhabiting bacterial community
135. Tomas Větrovský - Sequence processing fast and easy - SEED a GUI based user friendly sequence editor and pipeline for high-throughput amplicon processing
136. Alexandra Wolf - Agro-ecosystem type and soil aggregate size impact soil carbon dynamics
137. Ilya Yevdokimov - Microbial immobilization and incorporation into DNA of inorganic ³³P-labelled phosphorus
138. Lucia Žifčáková - Correlation of lignocellulolytic genes expression and their activity in ME fungal cultures

Soil Biogeochemistry and Nutrient Cycling

139. Roey Angel - Optimizing the toolbox to investigate free-living diazotrophs in soil - from bulk measurements to single-cell analysis.
140. Doreen Babin - Effect of phenanthrene on the release of mobile organic matter and the bacterial community structure in soil
141. Paul Bodelier - Unexpected stimulation of soil methane uptake by bio-based residue application - An emerging property of agricultural soils offsetting greenhouse gas balance
142. Runa Boeddinghaus - Land-use intensity and physico-chemical soil properties have distinct effects on microbial communities and enzyme activities of grassland soils
143. Ivano Brunner - Shifts of C and N isotopes in fruiting bodies of fungi after 12 years of irrigation of a semi-arid pine forest
144. Elisa Catão - Ammonia oxidizers in a non-nitrifying Brazilian savannah soil
145. Maria Cucu - Different agricultural practices drive aerobic and anaerobic ammonia oxidisers niche segregation in a temperate paddy soil
146. Andreas Demey - Impact of bioavailable phosphorus on plant and soil microbial communities in grassland under restoration management
147. Stefan Forstner - How does long-term nitrogen input influence stoichiometric relationships between soil microbes and their resources?
148. Bo Fu - The effect of temperature on the carbon isotope value of acetate in Philippine rice field soil
149. Ahlam Hamim - Phosphate solubilizing microorganisms isolated from root and rhizosphere soil of ericaceous shrubs in the north of Morocco.
150. Christine Heuck - Soil microbial biomass C:N:P stoichiometry and microbial use of organic phosphorus
151. Jiezhong Chen - The Expression Analysis of Plasma Membrane Aquaporin Gene EjPIP2 in Eriobotrya japonica After AM Fungi Inoculation
152. María Irisarri - Do soil type, rice cultivar and water management affect the bacterial denitrifying community of a paddy soil?

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153. Sheku Kanu - Interactive effects of *Bacillus subtilis* and seaweed (kelpak) on the growth, metabolites and yield of potato (*Solanum tuberosum* L.) under glasshouse conditions
154. Késia Lourenço - Effect of regular or concentrate vinasse on greenhouse gases emissions from soil with sugarcane
155. Sven Marhan - Nutrient limitation of soil microorganisms - effects of grassland land-use intensity
156. Dora Neina - Restoring the functional integrity of a Technosol with native organic materials
157. Maximilian Nepel - Identifying potential key players of N₂ fixation in European biological soil crusts
158. Laurent Philippot - Recently identified microbial guild mediates soil N₂O sink capacity
159. Frank Rasche - Lasting influence of biochemically contrasting organic inputs on abundance and community structure of total and proteolytic bacteria in tropical soils
160. Karolina Tahovská - Microbial activity in the context of acid deposition – field manipulations with sulphur and/or nitrogen inputs to the forest soils
161. Irina Tanuwidjaja - Influence of different clay minerals on the microbiome of soils and its functionality in simplified artificial systems
162. Cecile Thion - Predicting temporal and spatial variations in bacterial phylogenetic and phenotypic community structure in glacier forefield chronosequences
163. Yang Zhou - The functional profiles of soil microbial communities are determined by soil chemical properties but not community composition

Biodiversity and Functioning of Agricultural Soils

164. Pilar Andrés - Effect of biochar application to soil on soil microbial communities structure and feeding habits - a field study in Mediterranean soils
165. Olubukola Babalola - Metal tolerant, plant growth promoting soil bacteria protect plants against the toxic effects of heavy metals (Cd, Cr, and Ni)
166. Guillaume BAY - Effects of cropping system, depth, and sampling time on soil microbial communities
167. Andrew Bissett - Effects of temporal pH shifts on ammonia oxidiser community structure and function
168. Ian Clark - Response of Bacterial and Archaeal nitrifying populations to changing landscapes
169. Benjamin Costerousse - Characterization of the bacterial processes responsible for zinc solubilization in wheat rhizosphere
170. Florine Degruene - The influence of soil tillage on microbial communities changes along the soil profile
171. Anderson Ferreira – Soil bacterial community under integrative production system at biomes savanna and Amazon
172. Davide Francioli - Rhizosphere microbiome, plant community and soil nutrient availability - a new approach to survey the bacterial assemblage in soil

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173. Mercedes García Sánchez - Digestate and fly ash applications in agricultural soils - impact in the biomass and biodiversity of fungal communities.
174. Aurelia Gebala - Does Land-Use Intensity Influence Microbial Resource Partitioning and Microbial Colonization Strategies of Organo-Mineral Complexes in Grassland Soils?
175. Mariangela Girlanda - Plant genotype control over the recruitment of the tomato fungal microbiota
176. Daniel Graf - Community assembly processes of N₂O reducing prokaryotes in the rhizosphere- effect of edaphic factors and plant species
177. Yian Gu - Pathogen-induced shifts in exudation alter the rhizosphere microbiome
178. Moritz Hallama - Soil Microbial Phosphorus Dynamics are Affected by Cover Crops and Minimum Tillage
179. Penny Hirsch - Abundance and activity of soil microbial communities revealed by metagenomics and metatranscriptomics
180. Anna-Sofia Hug - Soil microbial diversity patterns at Sites of the Swiss Soil Monitoring Network
181. Christopher Jones - Field-scale spatial variation in co-occurrence patterns of ammonia and nitrite oxidizing communities.
182. Milko Jorquera - Exploring rhizobacterial community composition associated with plants grown in Chilean extreme environments using 16S rRNA-based molecular approaches
183. Hans-Martin Krause - Influence of soil management history on microbial N₂O production and reduction
184. Iva Krizkova-Kudlikova - Characterization of Actinomycetes Antagonistic to Streptomyces spp.
185. Martin Krsek - Bead-beating and isolation of environmental nucleic acids
186. Volery Lara - Effects of management on soil microorganism communities in Swiss vineyards
187. Guillaume Lentendu - Alfalfa root symbionts under soil nutrient pressure - cooperation or competition?
188. Hongwei Liu - Activation of salicylic acid defence signalling pathway reduced Archaea abundance and genes involved in nitrogen and carbon cycling in wheat rhizosphere
189. Pawel Lycus - Newly isolated denitrifiers from low and high pH soil show little correlation between genotype and phenotype
190. Jarmila Makovníková – The potential of agroecosystem services in relation to land use and biodiversity
191. Lokeshwaran Manoharan - Enzymes related to organic matter degradation and agricultural management
192. Shinsuke Mori - Changes in the oxidation-reduction potential and in bacterial profiles in the soil around direct-seeded rice under submerged conditions
193. Esther Muema - Biochemically contrasting organic inputs combined with mineral nitrogen fertilizer shape the temporal variation of ammonia-oxidizing prokaryotic communities in an agricultural soil
194. Mary Musyoki - Soil type, season and crop growth stage exert a stronger effect on rhizosphere microbial dynamics than the fungal biocontrol agent *Fusarium oxysporum* f.sp. *strigae*

SCIENTIFIC PROGRAMME

195. Lidia Nicola - Fumigation with Dazomet modifies soil bacterial and fungal communities in soil of apple orchards affected by Specific Replant Disease
196. Ansa Palojärvi - Improved general plant pathogen suppressiveness by agricultural management practices
197. Martina Putz - Long-term nitrogen fertilization affects microbial communities regulating N₂O emissions in arable soils
198. Vivian Rincon Florez - Impact of strategic tillage on nitrogen cycle genes (amoA and nifH) in no-till systems in Queensland, Australia
199. Jenna Ross - Isolation of a novel ammonia oxidising archaeon, representative of the Nitrososphaera 'sister' lineage
200. Suikinai Nobre Santos - Annotation of gene cluster Involved phenazine biosynthesis in Streptomyces CMAA 1322 also too structural elucidation of 1,6 dimethoxyphenazine.
201. Rumakanta Sapkota - Soil oomycete community structure association with cavity spot disease of carrot
202. Alise Senberga - Evaluation of Effectiveness of Rhizobia and Plant Interaction in Different Soil Types
203. Abhi Shah – Microbial activity along a continuous subsurface core from an agriculture field at the estuarine region of Mahi river: correlation with sediment characteristics
204. Hannes Schmidt - Diversity and spatial distribution of diazotrophs associated with micro-environments of wetland rice
205. Elvira Schnyder - Methanotroph diversity increases methane oxidation
206. Susanne Schreiter - Roots of decline? – The SARISA project
207. Magdalena Steiner - Microbial diversity and ecosystem functioning in vineyards
208. Nicolas Theodorakopoulos - Microorganism's enzymes implication in nitrous oxide emissions in a natural agricultural field at a fine time scale study
209. Maaïke van Agtmaal - Exploring the phytopathogenic seedbank of agricultural soils - diversity of soil borne plant pathogens in relation to edaphic properties and the soil microbial community
210. Wu Xiong - Effects of black pepper-vanilla rotation on vanilla rhizosphere fungal communities in relation to Fusarium wilt disease
211. Tianjie Yang - Trophic network architecture of root-associated bacterial communities determines pathogen invasion and plant health
212. Qing Yao - The functional profiles of soil microbial communities are determined by soil chemical properties but not community composition
213. Judith Zimmermann - The biocontrol agent Fusarium oxysporum f.sp. strigae – its detection and effects on beneficial indigenous microorganisms in a maize rhizosphere
214. Josephine Zimudzi - The microbial communities associated with potato rhizosphere under different seasonal conditions in South Africa

Biodiversity and Functioning of Forest Soils

215. Sarah Addison - Soil microbes and their importance in shaping our forests using qPCR

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216. Toke Bang-Andreasen - Responses in Active Microbial Communities and Expression of Important Functional Genes in Forest and Agricultural Field Soil after Wood Ash Addition Revealed by Metatranscriptomics
217. Tommaso Bardelli - Complex effects of altitude and exposure on microbial communities in (sub)alpine soils
218. Felipe Bastida - Landscape proteogenomics - explaining the functional-phylogenetic relationships of microbial communities by gradients of organic C availability in soil
219. Garazi Benito Carnero - Tree species effect on soil microbial community
220. Monique Carnol - Carbon substrate utilization and microbial biomass in European forest soils are related to tree species diversity
221. Carles Castaño Soler - Drying treatment of soil samples affects DNA recovery but does not change the fungal community structure by metagenomic analysis
222. Carla Cruz-Paredes - Using fungal and bacterial growth to evaluate the effects of ash application on forest soils
223. Timo Domisch - Winter in a changing climate affecting the survival of Scots pine seedlings
224. Beat Frey - Pyrosequencing based assessment of bacterial and fungal community compositions in compacted and regenerated forest soils
225. Anna Frymark-Szymkowiak - Soil β -Glucosidase activity under canopy of White Poplar in riparian forests.
226. Kezia Goldmann - Spatial variation of the fungal metagenome in temperate beech forests across Germany
227. Erika Gömöröyová - Soil microbial community changes in the disturbed Norway spruce stands during a 10-years period
228. Sue Grayston - CH₄ and N₂O microbial communities respond to site preparation and fertilization in wet forests
229. Michal Choma - Recovery of ectomycorrhizal community of a boreal forest after three decades of N fertilisation
230. Leticia Izquierdo - A new promising molecular marker to study the functional diversity of fungal communities - the glycosyl hydrolase 63 gene
231. Veronika Jílková - Methane flux in wood ant (*Formica polyctena*) nests and the surrounding forest floor
232. Jan Kopecký - Metabolite profiles of soil actinobacteria follow their phylogeny and environmental factors at the isolation sites
233. Diego Leiva Cáceres - Relations between *Peltigera* lichen's derived factors and its associated bacterial communities
234. Sandrine Malchair - Spatial variability of soil microbial processes in a temperate mixed forest
235. Oscar Martínez - Fungal communities associated with rhizosphere of *Nothofagus alpina* from different volcanic ash-derived soils in southern Chile
236. David Myrold - Development and Decline of Microbial Communities Associated with Ectomycorrhizal Mats
237. Pascal Nassal - The importance of fungal-fungal and bacterial-fungal interactions for phosphorus dynamics in forest soils
238. Mike Ogden - Fine scale modification of soil physical properties by fungi - reinforcement and repellency in the hyphosphere

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239. Jade O'Leary - Multi-dimensional mycelia interactions
240. Xavier Parlade – Dynamics of *Boletus edulis* extraradical soil mycelium and sporocarp production in managed forests
241. Taina Pennanen - Virus host switches between pathogenic, mycorrhizal and saprotrophic fungal species in a boreal forest
242. Camilla Pereira – Arbuscular mycorrhizal fungi in protected areas of northeastern Brazil
243. Diogo Pinho - A first look at the *Quercus suber* (cork oak) root microbiome - differences between healthy and declined trees
244. Flavia Pinzari - Overlap in the metabolic functions of cellulose-decomposing leaf litter fungi
245. Tereza Poláčková - Ecology of soil yeast communities in mixed temperate forest soils
246. Daria Rapoport - Isolation and cultivation of actinobacteria from acid soils with high occurrence of Trebon clade
247. Ana Rincón - Fire recurrence effects over the structure and activity of ectomycorrhizal fungal communities in Mediterranean pine forests
248. Alice Roy-Bolduc - High richness of ectomycorrhizal fungi and low host specificity in a coastal sand dune ecosystem
249. Minna Santalahti - Revealing sources of biological methane production in boreal upland forest
250. Outi-Maaria Sietiö - The effect of photosynthesis-derived C flow on the microbial community structure and enzymatic activities in boreal forest
251. José A. Siles - Archaeal, bacterial and fungal abundance and diversity along an altitudinal gradient in Alpine forest soils
252. Izabela Sondej - Impact of wild boar (*Sus scrofa*) rooting on the soil seed bank in Białowieża Forest.
253. Martina Štursová - Spatial heterogeneity of mountainous soil is associated with high beta diversity of microbial community
254. Martina Vašutová - Mycorrhizal community structure across an alpine tree line ecotone
255. Christina Weißbecker - Patterns of soil fungal communities in subtropical Chinese forests in relation to plant diversity

Interactions among Micro- and Macroorganisms

256. Ina Alsina - The yield of onions and its quality depending on mycorrhiza inoculation
257. Lucas Braga – Earthworm-microbe interaction can be associated to less harsh conditions in green sugarcane systems
258. Ana Correia - Carbon source and availability influence the production of antimicrobial compounds
259. Alper Dede – Rhizosphere of olive tree: a source of plant growth promoting bacteria
260. Laila Dubova - The effects of mycorrhiza fungi on the tomatoe plant water retention ability
261. Iva Cholakova - Characterization of plant-associated bacteria isolated from highly drought tolerant *Pistacia terebinthus*

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262. Polina Ivanova - Antibiotic activity of actinobacteria associated with millipedes and earthworms
263. Xianwang Kong - Effects of the nitrification inhibitor 3,4-dimethylpyrazole phosphate (DMPP) on N₂O emissions from clover residues and interaction with the earthworm *Lumbricus terrestris*
264. Tat'yana Kotova - Suppressive activity of the intestinal fluid of diplopods against yeasts
265. Ines Mandic Mulec - Kin discrimination between sympatric soil isolates of *Bacillus subtilis*
266. Lucas Mendes - The role of rhizosphere microbiome in soilborne fungal disease suppression in common bean
267. Anna Rawlings - Decay in the canopy
268. Ruth Schmidt - Microbial airborne talk - effect of fungal volatiles on bacteria
269. Ana Soares - Specificity and biotic local selection in *Streptomyces* interactions influences antimicrobial activity
270. Tamara Těšitelová - Two widespread green *Neottia* species (Orchidaceae) show mycorrhizal preference for Sebaciniales in various habitats and ontogenetic stages
271. Sannakajsa Velmala - Function by form - a tentative insight to the link between growth and the diversity of ectomycorrhizal fungi
272. Zhihui Xu - Comparative proteomics analysis of *Bacillus amyloliquefaciens* SQR9 revealed the key proteins involved in in situ root colonization

Microbes in the Changing Environment

273. Abdulmajeed Al Khajeh - Fish emulsion as a food base for halophilic actinomycetes promoting growth of *Salicornia bigelovii* in a sandy soil in the United Arab Emirates
274. Rana Shahbaz Ali - Effects of substrate complexity and temperature on growth of different microbial groups
275. Sawa ARAI - Carbon-starvation in light induced tolerance to hyperosmotic stress in purple photosynthetic bacterium *Rhodospseudomonas palustris*
276. Andrea Borsodi - Microbial communities inhabiting the rhizosphere of halophyton plants living nearby Hungarian soda lakes
277. Tabitha Bucher - Disturbance of the bacterial cell wall specifically interferes with biofilm formation
278. Cristina Cruz - Alleviating the N limitation expands the possibilities for structuring soil bacterial communities - evidence based on the impacts of 5 years' manipulation of N dose and form in a Mediterranean ecosystem
279. Jonathan De Long - Soil microbial and nematode communities respond differently to warming and plant functional group removal across a post-fire boreal forest successional gradient
280. Teresa Dias - Impacts of N enrichment on Mediterranean biological soil crusts community and functions - the unseen evidence from soil pigments
281. Francisco Dini-Andreote - Unveiling the blueprint of marine-terrestrial transition in bacterial adaptation and evolution

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282. Dana Elhottová - Bacterial antibiotic resistance heterogeneity in natural subterranean habitats
283. Huyuan Feng - Influences of Long-term Nitrogen Fertilization on Fungal Endophyte Community of Three Grasses in an Alpine Meadow
284. Nawras Ghanem - The transport of marine phages in soil as a tool of understanding the interaction of surface-subsurface events
285. Osnat Gillor - Hydration dynamics in desert soil mediate antagonism of actinobacteria
286. Sydney Glassman - Ectomycorrhizal fungal spore bank recovery after a severe forest fire: Some like it hot
287. Catarina Gouveia - Effect of Increased N availability on Ammonium oxidizing bacteria populations – A possible Bioindicator in Mediterranean ecosystem
288. Kelly Gravuer - Phylogenetic estimation of ecologically important traits illuminates microbial community responses to change in natural and agro-ecosystems
289. Stefan Green - Methodological Improvements to Amplicon-Based Surveys of Microbial Community Structure
290. Jeremiah Henning - Fungi on mountainsides - contrasting elevational and seasonal patterns among root-associated fungal groups.
291. Andreas Herrmann - Spatial and seasonal variability of the microbial community in forest fen soils on North-East-Germany
292. Jana Judova - The Contingency of some Biotic and Abiotic Parameters in Arable Land and Permanent Grasslands
293. Tatiana Khomutova – Characterization of microbial pool in sub-kurgan paleosols of different ages in desert-steppe zone in relation to the holocene dynamics of climate
294. Sara König - Hot spots and cold spots – modelling biodegradation dynamics under disturbance regimes
295. Ramóna Kovács - Characterization of mycorrhizosphere in a Hungarian saline-sodic grassland
296. Anna Kuznetsova - The first study of actinomycetes complexes in Prietonie region soil
297. Xiaofei Lyu - Soil bacterial community along a successional series of tidal flats in the Yellow River Delta
298. Aurora MacRae-Crerar - Ecological determinants of soil bacterial community structure across multiple scales in a Mongolian global change experiment
299. Marta Misiak - Soil fungal responses to warming in polar regions
300. Luis Morgado - Compositional shifts in arctic ectomycorrhizal fungal community in response to long-term increased snow depth in Northern Alaska
301. Eric Morrison - Soil warming changes litter chemistry and fungal community composition but not decomposition rate
302. Sally Otto - Catch me if you can – The impact of mycelia-based dispersal on predator-prey interactions and biodegradation of soil contaminants
303. Prashant Pant - 16S rRNA gene family based microbial typing of rhizospheric communities of a native legume *Alysicarpus vaginalis* (L.), fam. Fabaceae.
304. Elizaveta Pershina - Looking for the core microbiome of the main types of soils in Russia
305. Kristin Rath - The influence of salinity on saprotrophic fungi and bacteria in soil
306. Klára Řeháková - Potential activity of microbial community in the Biological Soil Crusts

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307. Nermina Saronjic - How do soil microbial communities react on droughts and heavy rainfall events?
308. Philipp-André Schmidt - Response of Soil Fungal Communities to Extended Drought
309. Frank Solano-Campos - Preliminary data of soil nematode communities along a rainfall gradient in Costa Rica.
310. Afnan Suleiman - Active microbial community resilience in disturbed soil with nitrogen source enrichment and nitrification inhibitor
311. Tibor Szili-Kovács – Genetic diversity and catabolic activity profiles of rhizosphere bacterial communities during dry and wet seasons in a solonchak grassland, Hungary
312. Alexandra Šimonovičová - Spatial distribution of microscopic fungi under old environmental burdens
313. Adam Šťoviček - Bacterial response to rainfall and draught cycles in desert soil
314. Daniela Trojan - Investigating the ecophysiology of the ubiquitous Acidobacteria in the dynamic soil environment
315. Tushar Yadav - Effect of Cosmetic Based Nanowaste on Sludge and Soil Microflora
316. Baogui Zhang - Response characteristics of soil microorganism to permafrost degradation in the upstream regions of the Shule river basin, Qinghai-Tibetan Plateau
317. Junling Zhang - Unexplored Biodiversity and Function of arbuscular mycorrhizal fungi on the Tibetan Plateau

Microbial Life in Contaminated and Anthropogenic Soils

318. Valeria Ancona - Microbiological indicators to evaluate soil quality of degraded areas in Southern Italy after compost addition
319. Thomas Banitz - Spatial metrics indicate bacterial degradation benefits from mycelial networks
320. Angelantonio Calabrese - Use of molecular techniques to characterize the microbial communities for soil ecology assessment in degraded sites.
321. Juan Campos - Soil dehydrogenase activity under the presence of some exobiotics. A toxicity index is proposed.
322. Stefano Covino - A pyrosequencing-based metagenomic study of microbial communities during co-composting of creosote-impregnated wood and green wastes
323. Sabrina Festa - Monitoring the impact of bioaugmentation with a PAH-degrading strain on different soil microbiomes using pyrosequencing
324. Alena Filipová - A novel bioaugmentation approach for PAH-degrading bacteria in soil: Adaptability as assessed by molecular biology techniques
325. Fanny Flores - Microbial activity of chromium polluted soil from Guanajuato México, during in situ biostimulation assay.
326. Ulrike Gerber - Interactions of natural occurring eukaryotic microorganisms with uranium(VI)
327. Paola Grenni - Effects of compost addition and *Medicago sativa* occurrence on PCB biodegradation in a historically contaminated soil

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328. Anna Grobelak - The possible application of microorganisms in promoting plant growth and improving plant biomass in the phytoremediation of anthropogenic and contaminated soils
329. María Gutiérrez Núñez - Non-target effects of pesticides on the microbial activity in agricultural soil
330. Lenka Harantová - Factors influencing microbial community development during primary succession on spoil heaps after brown coal mining
331. Karin Hellauer - Sequential managed aquifer recharge leads to a high diverse microbial community resulting in a better attenuation of moderate degradable trace organic chemicals (TOC)
332. Anne Houles - Ecological restoration of nickel mine sites in New Caledonia - Characterisation of ectomycorrhizal fungal community the key enabling the monitoring of facilitation process between plants.
333. Alica Chroňáková - Boreal acid sulphate soils – changes in bacterial communities along vertical profile and between total and active pools
334. Inge Jambon - Bioremediation of chlorendic acid, a highly chlorinated organic pollutant, by exploiting a fungal-bacteria consortium native to the contaminated field
335. Michal Kaminski - Omics approach in analysis of *Pseudomonas mandelii* ssp. capable of bioaccumulating hexachlorocyclohexane
336. Hülya Kaplan - Diversity of bacteria involved in ¹³C-labelled wheat root decomposition and efflux-mediated metal resistance in metal contaminated soils remediated with amendments
337. Pawel Krawczyk - Bioinformatic approach to analysis of plasmid pool in metagenomes from polluted soils
338. Jennifer Mesa Marin - Ecology of soil bacteria in bioremediation - indigenous plant growth promoting rhizobacteria in native *Spartina maritima* as a tool for the restoration of heavy metal polluted salt marshes
339. Zuzana Michalkova - Interactions of nano zerovalent iron with *Acidithiobacillus ferrooxidans* – Implications for soil remediation
340. Annett Mikolasch - Oil-degrading bacteria isolated from the rhizosphere of plants growing in oil-contaminated soils from Kazakhstan
341. Irma Morelli - Pyrosequencing reveals bioaugmentation impact on the dynamics of bacterial community on phenanthrene-contaminated soil
342. Marta Moreno Valencia - Effect of olive and vine wood ashes on the dehydrogenase activity in a crop land.
343. Martina Plačková - Bacterial community characteristics under decades-lasting antibiotics selection pressures
344. Thomas Pommier - Response of soil microbial community to titanium dioxide nanoparticles - a cascading pitch on the nitrogen cycle
345. Pavla Průchová - Composition and activity of microbial communities in soil contaminated by heavy metals
346. Rashmi Saikia - Influence of sources of carbon in growth media on the yield of biosurfactant by the microbe isolated from crude oil contaminated soil
347. Hokyung Song - Abandoned tropical tin mine site shows changes in microbial community with restoration

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348. Gangavarapu Subrahmanyam - Abundance and diversity of ammonia oxidizing archaea and bacteria in long-term industrial effluent polluted soils, Gujarat, Western India
349. Karel Švec - Composition of fungal and bacterial communities in mercury polluted areas
350. María Touceda-González - Molecular characterization of the rhizobacterial communities of two Ni-hyperaccumulating subspecies of *Alyssum serpyllifolium* endemic to the Iberian Peninsula.
351. Gustavo Valdecantos - Biotic and abiotic factors affect the colonization and the dynamics of bacterial community assemblage in irradiated soil microcosms
352. María Vásquez Murrieta – Metal tolerance and biosorption potential of endophytic fungi isolated from *Bahia absinthifolia*
353. Carl-Eric Wegner - Persisting in slag – insights into aluminium resistance from early industrial mineral leaching
354. Franco Widmer - Effects of different nanoparticles on soil microbial community structures and plant-microbe interactions
355. Yucheng Wu - Responses of Thaumarchaeotal community in agricultural soils to acidification and polycyclic aromatic hydrocarbons contamination
356. Lijuan Yan - Comparative phylogenetic analysis of bacterial community dynamics during multi-year bioremediation of oil-contaminated soil in a boreal climate

Archaeomicrobiology, Paleomicrobiology and Microbial Forensics

357. Cecile Gubry-Rangin - Molecular adaptation of the ammonia monooxygenase *amoA* gene during the ancient and rapid diversification of terrestrial Thaumarchaeota
358. Eline van Asperen - Establishing dung fungal spores as a proxy for herbivore abundance - an experimental approach