

LIST OF POSTERS

THURSDAY 28.4.

Microbial Nutrient Cycling and Biogeochemistry

- 69 Mohd Faizal Ahmad Ramli - The effect of using different quality and quantity of carbon component on the acid phosphatase enzyme activity in peat
- 70 Rozelin Aydin - Identity and ecophysiology of bacteria producing GDGT membrane lipids
- 71 Amanda Barbosa Lima - Influence of land use change on denitrifier community composition in Terra Preta de Índio (Amazonian Dark Earth) soils of Central Amazonia
- 72 Per Bengtson - Rhizosphere priming effects revealed by coupling of C and N turnover
- 73 Christoffer Berner - How does tree nutrient status affect ectomycorrhizal growth and community structure
- 74 Sergey Blagodatsky - Fungi-to-bacteria ratio affects N₂O emission from soils: experimental evidence and modelling
- 75 Gunnar Börjesson - Microbial changes in top- and subsoil in along-term soil organic matter experiment revealed by phospholipid fatty acid analysis
- 76 Christian Brandstätter - Early beech litter decomposition responds to N form and concentration
- 77 David Bru - Determinants of the distribution of nitrogen-cycling microbial communities at the landscape-scale
- 78 Else Bünemann-König - Microbially mediated P cycling in a permanent grassland soil as affected by mineral P fertilization
- 79 Thomas DeLuca - Biological nitrogen fixation greatly explains ancient sustained use of alluvial meadows and wetlands
- 80 Magnus Ellström - Where does the Nitrogen go? -Uptake and storage of ammonium in the ectomycorrhizal fungi *Paxillus involutus*.
- 81 Hans Göransson - Soil bacterial growth and nutrient limitation along a chronosequence from a glacier forefield
- 82 Nehad Gungumjee - Antimicrobial activity and impact of propolis on molecular nature and proteins pattern of *Candida albicans*
- 83 Ji-Zheng He - Abundance and composition of ammonia-oxidising bacteria and archaea in selected Chinese soils
- 84 Anne-Sophie Hesse - Effects of inorganic nutrients bioavailability on bacterial and microalgal communities during sediments drying
- 85 Adrian Ho - Aging well: methane oxidation and methane oxidising bacteria along a chronosequence of 2000 years.
- 86 Jaroslav Hynš - Efficient transformations of soil nitrogen in contrasting ecosystems
- 87 Edith Joseph - Novel application of *Beauveria bassiana* in transformation of toxic metals.
- 88 Anna Karlsson - The role of archaea in the turnover of root and mycorrhizal exudates in soil
- 89 Zuzana Kolářová - Fungal succession in litter of Norway spruce (*Picea abies*) revealed by cultivation method and T-RFLP
- 90 Helen Liiva - Fine-root decomposition affected by heavy metals in forest soils
- 91 Catarina Magalhaes - Impact of Copper on the Diversity, Abundance and Transcription of Nitrite and Nitrous oxide reductase genes in urban estuarine sediments
- 92 Gaëtan Martin - Role of bacteria and fungi on pH shift in soil under the influence of calcium oxalate.
- 93 Theresa McHugh - The Impact of Monsoon Moisture on Soil Microbial Populations and Nitrogen Mineralization
- 94 Pauline Mele - The metagenomics of an Australian arid zone soil. Resolving diversity and functional differences in the microbial communities in a land-use comparison.
- 95 Laura Meredith - Investigations into the Atmospheric H₂ Energetic Fertilization of Soil Microorganisms in a Forest Ecosystem
- 96 Ember Morrissey - Linking resource availability to the structure and function of microbial nitrate reducers in freshwater wetlands
- 97 Maria Niklińska - Carbon and nitrogen mineralization in soils differently polluted with heavy metals
- 98 Levin Pal - Tight coupling of peat nitrogen and organic carbon cycle is diverse in relation to temperature
- 99 Katharina Palmer - Impact of cryoturbation on denitrifier community structure and activity in N₂O-emitting arctic permafrost peat soil
- 100 Tim Philpott - Transfer of inorganic and organic 15N to woody debris via mycelial cords of the wood decay fungus *Hypholoma fasciculare*.
- 101 Jessica Poirer - Bacterial expression of metal transporters as a biomarker of metal bioavailability in soils.
- 102 Kim Schneider - Phosphorus availability in organic dairy farm soils: A closer look at the role of soil biology
- 103 Nejc Stopnišek - Influence of acidity on the abundance and diversity of soil Burkholderia populations
- 104 Miloslav Šimek - Distribution of methanogens and aerobic methanotrophs in soil profile of Finnish boreal acid sulphate soil
- 105 Catarina Teixeira - Rates and Environmental Controls of Anaerobic Ammonium Oxidation in Estuarine Sediments

- 106 Alexander Tischer - Effects of DOM on mineralization processes and microbial community structure in managed and abandoned pasture soils in Southern Ecuador
107 Vladimir Vujanovic - Fungal endophytes confer drought and heat tolerance in wheat
108 Yucheng Wu - Long-term field fertilization significantly alters the community structure of ammonia-oxidizing bacteria rather than archaea in a paddy soil
109 Limei Zhang - Effect of Nitrogen Loading Levels on the Abundance and Composition of Soil Ammonia Oxidizing Prokaryotes in a Semi-arid Temperate Grassland

Fungi in the Soil Microbial Community: Symbiosis, Competition, Antagonism

- 110 Pablo Cornejo-Rivas - Influence of plant cover on the composition and structure of the arbuscular mycorrhizal fungal community in a simulated semi-arid Mediterranean environment
111 John Davison - Arbuscular mycorrhizal fungal communities in plant roots are not random assemblages
112 Anna Egorova - Stress tolerance of *Paecilomyces lilacinus* (Thom.) Sampson in extreme environments
113 Steffi Formann - GST activity in the hyphal world
114 Marcela Franco Correa - Phosphate mineralizer Actinomycetes involved in root interaction of *Glomus* sp. and white clover
115 Rukaia Gashgari - Isolation, Identification and Distribution of Halophilic Fungi
116 Leyla Hassani Rezaei - Influence of tripartite symbiosis on growth and water relations of alfalfa under drought stress in sterilized soils
117 Hana Hršelová - Summer truffle (*Tuber aestivum* Vittad.) - conservation status, genetic diversity and distribution in Czech Republic
118 Martina Janoušková - Discrimination and quantification of two *Glomus* intraradices isolates in plant roots by Real-Time PCR assays in mitochondrial DNA
119 Petr Kohout - Endophytic fungi in the roots of submerged aquatic plants
120 Maria Korneykova - The complexes of microscopic fungi in the soil polluted by airborne aluminium plant emission
121 Philippe Lemanceau - Description of a strategy for analyzing the feedback loop of the interactions between plants, arbuscular mycorrhizal fungi and bacteria
122 Cajsja Lithell - Are ectomycorrhizal fungi a single functional group?
123 Tamara Malinová - Saprophytic Sebaciniales, clade B, form mycorrhiza with *Neottia ovata* and *N. cordata* (Orchidaceae) in different habitats on a broad geographic scale.
124 Olga Marfenina - Global warming and potentially pathogenic microfungi in soils
125 Adalia Mergulhao - Restriction profiles of amplified ribosomal DNA in species of mycorrhizal fungi
126 Michiel Op De Beeck - Heredity of Heavy Metal Tolerance in the Ectomycorrhizal Basidiomycete Fungus *Suillus luteus*
127 Mirka Petrankova - Determination and evaluation of free and total ergosterol in soil.
128 Francesc Prenafeta Boldú - Biodiversity and ecology of soil fungi in a primary succession of a temperate coastal dune system
129 Tomislav Radic - Varying efficiency of mycorrhizal establishment in pot cultures – plant hosts' role
130 Max Bernhard Rudnick - How do mycophagous bacteria find their fungal bait?
131 Yury Shneyder - Metabolic Stability of Soil Saprophyte *Trichoderma* spp. in Association with Other Soil Fungi
132 Zoe Smith - Functional diversity of *Platanthera* orchid mycorrhizas
133 Radka Sudová - Arbuscular mycorrhizal symbiosis on serpentine soils: the effect of native fungal communities on different *Knautia arvensis* ecotypes
134 Zuzana Sýkorová - The time-course development of the co-inoculated native and non-native arbuscular mycorrhizal fungi in the roots of *Phalaris arundinacea* in a greenhouse experiment
135 Jaroslav Šnajdr - Saprotrophic basidiomycete mycelia and their interspecific interactions affect spatial distribution of extracellular enzymes in soil
136 Mika Tarkka - Mushrooms – site for symbiotic interactions between soil yeasts, bacteria and filamentous fungi?
137 Martin Vohník - Distribution, morphological diversity and mycobiont identity of root-fungus associations in European bilberry at twelve contrasting sites in Norway
138 Petra Weißhaupt - Nitrogen metabolism of wood decomposing basidiomycetes and their interaction with diazotrophs as revealed by IRMS

Interactions among Micro- and Macroorganisms in Soils

- 139 Xu Cheng - Regulator-based genome mining for novel bioactive compounds in soil bacteria
140 Sandrine Demaneche - Likelihood of horizontal gene transfer between transplastomic tobacco and plant associated bacteria
141 Rima Franklin - The effects of hydrology and vegetation on microbial community structure and function in the sediments of freshwater wetlands
142 María Gómez Brandón - Effects of epigeic earthworms on the structure and activity of microbial decomposer communities

- 143 Zalán Homonnay - Changing of faecal bacterial communities under different feeding conditions of the Judean mole rat (*Spalax judaei*) (Rodentia, Spalacinae)
- 144 Anna Jonsdottir - Characterization of the non-phototrophic bacterial symbiomes of Icelandic lichens
- 145 Mirrka Kotiaho - Actinobacteria communities in boreal bogs
- 146 Anna Koubova - Methanogenic community in cattle-impacted soil incubated with *Eisenia andrei* earthworms
- 147 Saisamorn Lumyong - Isolation and Screening of the Nematocide Producing Microorganism from Plant-Parasitic Nematode Infested Soil in Thailand
- 148 Maria do Carmo Lyra - molecular characteristics of rhizobia isolated from nodules of peanut grown in Brazilian soils
- 149 Gincy Mathew - The occurrence of *Bacillus* species and their potential roles in fungus comb of *Odontotermes formosanus* (Fungus growing black subterranean termite)
- 150 Rashid Nazir - A cosmopolitan *Burkholderia terrae* equipped as universal migrator along different fungal hyphae
- 151 Attila Németh - Comparison of caecal bacterial communities of different Eurasian mole-rat species (Rodentia: Spalacinae)
- 152 Cindy Prescott - Patterns in forest soil microbial community composition across a range of regional climates in western Canada
- 153 Petra Prouzová - Interactions between microbes and plants in PCB contaminated soil
- 154 Anuliina Putkinen - Diversity of active methanotrophic bacteria in Sphagnum mosses growing on a peatland chronosequence
- 155 Anja Ramm - Earthworms Stimulate the Microbial Degradation of 2,4-DCP in Soil
- 156 Maria Luiza Silva - Molecular characterization of endophytic bacteria associated with the culture of forage cactus (*Opuntia* spp.)
- 157 Yosef Steinberger - The impact of desert shrubs on soil microbial diversity
- 158 Jan Dirk van Elsas - Exploring novel bacterial biopolymer-degrading functions - diversity and abundance of chitinases in different habitats
- 159 Laure Weisskopf - *Burkholderia* species are major inhabitants of white Lupin cluster roots

Microbes in the Changing Environment: Global Climate Change and Soil under Human Impact

- 160 Ana Catarina Afonso - Effect of *Pinus halepensis* thinning on soil microbial community in a revegetated limestone quarry
- 161 Ademir Araújo - Degradation and restoration of degraded lands and their effects on soil microbial biomass in Northeast Brazil
- 162 Martin Bartuska - Respiration of deep subsurface miocene sediment and microbial community changes early after excavation
- 163 Marianne Benesch - Using stable isotope labeling to trace SOM decomposition and transformation by microbes under different silvicultural managements in the Munessa forest, Ethiopia
- 164 Elizabeth Bent - Soil bacterial community composition changes in response to ectomycorrhizal exudates produced under ambient and elevated levels of CO₂
- 165 Johanna Birgander - Seasonal variation in microbial biomass, growth rates and microbial community composition in a sandy
- 166 Aimeric Blaud - Impact of acute nitrogen deposition on microbial community structure and abundance in the Arctic tundra soil
- 167 Cécile Caupert - In situ and long-term evolution of fungal abundance and community structure in a polycyclic aromatic hydrocarbon and heavy metal contaminated soil: effects of plant cover and desorption
- 168 Nicolas Chemidlin Prevost-Boure - Soil Fungal Communities Ecology: a Biogeographical Approach
- 169 Marcin Chodak - Estimation of microbial properties in mine soils using NIR spectroscopy
- 170 Jongsik Chun - Variation in soil bacterial flora within and between habitats in semi-arid Mongolian steppe margins
- 171 Sarina Claassens - Microbial community function and structure in rehabilitated asbestos and coal discard sites
- 172 Cristina Cruz - Responses of the nitrifying community to nitrogen additions in a Mediterranean ecosystem.
- 173 Anne Daebeler - Disentangling the effects of enhanced nitrogen deposition and temperature on ammonia-oxidizing archaeal communities?
- 174 Emelia DeForce - Effect of land-use and activity on potential ammonia-oxidizing thaumarchaeota and bacterial communities in Costa Rican tropical soils
- 175 Teresa Dias - Short-term responses of soil microbial communities to N enrichment in a Mediterranean ecosystem.
- 176 Lur Epelde - How does the interaction between pollution and other sources of environmental stress affect soil health?
- 177 David Fernández-Calviño - pH effects on soil bacterial community growth
- 178 Marina Fernandez-Delgado Juarez - Influence of wood ash on ammonia oxidizing bacteria and archaea in a grassland soil.
- 179 Nadezda Fokina - Biological recultivation of the soil contamination with oil products at high latitudes
- 180 Georgios Giannopoulos - The effect of pH on nitrous oxide emissions and nitrous oxide reductase from soil bacteria (*Paracoccus denitrificans*).
- 181 Osnat Gillor - Linking the active and dormant microbial communities structure to soil moisture in arid environments
- 182 Milan Gryndler - Changes of soil microflora associated with simulated climatic change

- 183 Ute Hamer - Response of soil microorganisms to land-use change in different ecoregions
- 184 Merian Haugwitz - Five years of increased temperature and drought affect soil microorganisms in a temperate heath ecosystem
- 185 Helen Hayden - Microbial community composition changes under elevated CO₂ and warming in a native vegetation grassland
- 186 Galit Hermann - Sex hormones – soil-microbial community interaction in a Mediterranean agroecosystem
- 187 Jakub Hofman - Effects of winter road salting on soil microorganisms at grassland and forest site
- 188 Anna Ivanova - Functional structure of soil microfungi in urban ecosystems (for example city Moscow)
- 189 Jiří Jirout - Cattle overwintering governs changes of fungal communities in upland pasture soil
- 190 Aurore Kaisermann - How do drought and rain events impact soil microbial communities greenhouse gas production?
- 191 Eva-Maria Kastl - Response of functional microbial community size and activity to nitrogen fertility gradients in the rhizosphere of subalpine grasses
- 192 Beata Klimek - Zinc and copper effect on soil microbial community structure the rhizosphere of the Scots pine and the bulk soil.
- 193 Dirk Krueger - Microbial communities of barren terrestrial surfaces from previous mining or other causes
- 194 Sven Marhan - The influence of climate change on N-cycling microorganisms in soil
- 195 Magalí Martí Generó - Bacterial and archaeal communities in hollow hummock gradients in peatlands receiving different levels of nitrogen deposition.
- 196 Frantisek Nerud - Microbe-catalysed processes in soil polluted with a mixture of organic xenobiotics
- 197 Alexia Pailler - Assessing Mediterranean forest soil microbial community vulnerability to water stress across a bioclimatic gradient of aridity
- 198 Ansa Palojarvi - Reduced tillage changes fungal diversity and functioning in arable soil
- 199 Jiří Petrásek - Heterotrophic bacterial communities of Miocene lacustrine sediment
- 200 Ines Petric - Response of the PCB-contaminated soil bacterial community to applied bioremediation treatments
- 201 Barbara Pivato - Genetic structure and diversity of bacterial communities as affected by spatiotemporal variations of drought stress conditions in Sahelian region
- 202 Seth Pritchard - Production, standing crop, and survivorship of mycorrhizal root tips in a loblolly pine forest exposed to free-air-CO₂-enrichment for a decade: Interactive effects of soil N availability
- 203 Judith Pump - Analyzing plant-derived methane emission and archaeal community composition in paddy soil via stable isotope labeling
- 204 Lionel Ranjard - Biogeographical Patterns of Soil Molecular Microbial Biomass as Influenced by Soil Characteristics and Management
- 205 Salvador Rodríguez Zaragoza - Effect of Medicago sp. Root Zone on Trophic Structure of Naked Amoebae Community after an Intense Pulse of Contamination with Combustoleo
- 206 Stefan Ruyters - Co-tolerance to zinc and copper of the soil nitrifying community and its relationship with the community structure
- 207 Olga Ruzova - Impacts of temperature regime on microorganisms in cryolithozone
- 208 Mirjam Selzer - Alpha- and Gammaproteobacteria are Dominant Denitrifiers in Soils as Indicated by Isolation and Next Generation Sequencing
- 209 Chen Sherman - Litter decomposition – microbial-community associations along a rainfall gradient
- 210 Astrid Stacheter - Methylophile Diversity in Grassland and Forest Soils As Revealed by Cultivation and Pyrosequencing of Structural Genes
- 211 Anna Stefanowicz - Soil microbial communities are influenced by soil fertility, herbaceous vegetation and metal pollution in the Pb-Zn mining and smelting area (Olkusz, S Poland)
- 212 Zuzana Stehlíková - Comparison of the incidence of tetracycline resistance genes between pristine and agricultural manured and non-manured soils
- 213 Mingxia Su - Influence of copper contamination on nitrification and denitrification pattern in arable soils after freezing and thawing
- 214 Bo Svensson - Bacterial and archaeal communities in hollow – hummock gradients in peatlands receiving different levels of nitrogen deposition
- 215 Adrian Unc - Community level microbial diversity, nitrogen cycling potential, and physiological profiles in arid lands affected by natural gas extraction activities.
- 216 Michaela Urbanová - Bacterial communities in topsoil during spontaneous succession in spoil heaps after brown coal mining
- 217 Maria Vásquez Murrieta - ANALYSIS OF Siderophore producers free-living rhizospheric bacteria isolated of plant growing on mine tailings in central Mexico
- 218 Tomáš Větrovský - Involvement of actinobacteria in organic matter transformation in heavy metal contaminated soils
- 219 Xavi Vila - The microbiota of unpolluted Mediterranean soils faces up chlorophenols: evidences of resistant strains with potential for bioremediation
- 220 Karel Waska - Hyperalkaline (pH>12) aquifers of Calumet wetlands, South Chicago, IL, USA: Biodiversity and Remediation Study

Soil Organic Matter Decomposition and Enzymes in the Soil Environment: From Molecules to Communities

- 221 Mariarita Arenella - A multidisciplinary approach to study proteins-humic substances interactions
- 222 Daniel Arotupin - Screening of fungal isolates from Nigerian tar sand deposit in Ondo State for novel biocatalysts
- 223 Uthra Balasubramaniyan - Diversity of lipase producing bacterial strains of oil contaminated soils and their hydrolytic activity
- 224 Ivana Eichlerová - Laccase activity of soils: selection of the optimal enzyme assay conditions
- 225 Yili Huang - Potential roles of quorum sensing and biofilm formation in biodegradation of PAHs by microbial community from soils
- 226 Maria Kupryashina - Purification of the bacterial Mn-peroxidase in the rhizospheric bacterium *Azospirillum brasilense*
- 227 Eiko Kuramae - Unraveling maize litter decomposition by 18S rRNA and metatranscriptomic analyses of soil-borne microorganisms
- 228 Gwenaëlle Lashermes - Influence of plant residue quality on enzymes dynamics: Importance of enzyme distribution between soil and residue.
- 229 Jana Maková - Monitoring of microbial biomass and respiration activities in Slovak soil types
- 230 Heidy Schimann - Nutrients limitation of decomposition in a tropical rainforest of French Guiana
- 231 Leila Qasemian - Potential of anthracene detoxification through biotransformation: a study of indigenous microbial activities from a *Pinus halepensis* litter situated in a Mediterranean coastal area
- 232 Francois Rineau - Degradation of organic matter by the ectomycorrhizal fungus *Paxillus involutus* - substrate modification and global patterns of gene expression
- 233 Firoz Shah - Proteases secreted by the ECM fungus *Paxillus involutus* growing on organic N sources
- 234 Eileen Schuetze - Growth of *Streptomyces mirabilis* P16B1 in heavy metal contaminated soil and impact to Soil Organic Matter formation
- 235 Angela Straathof - Is Disease Suppression of Soil-borne Plant Pathogens Reflected in Properties of Dissolved Organic Matter?
- 236 Martina Štursová - Analysis of cellulose degrading microbial community in mountainous spruce forest soil by stable isotope probing
- 237 Elena Vetchinkina - Phenol oxidase activity of *Azospirillum* bacteria and its relationship with endogenous lectins
- 238 Jana Voriskova - Diversity of fungal genes encoding enzymes catalysing decomposition processes in forest topsoil

Agricultural Soils: Biodiversity and Functioning

- 239 Nuria Bonilla - Suppressive organic amendments of avocado root rots: effect on microbial diversity and activities of soil and rhizosphere
- 240 Lamia Bouziri - Impact assessment of irrigation by treated wastewater on soil bacterial genetic structure diversity of Nabeul-Tunisia irrigated areas
- 241 Fiona Brennan - Impact of microbial community structure on suppression of *E. coli*, *Salmonella* and *Listeria* spp. in a sandy-loam agricultural soil
- 242 Maria Julia Brossi - Diversity and quantification of dioxygenases genes (bph) in Amazonian "Terra Preta" Anthrosols
- 243 Yanelly Cabrera - Structure of cellulolytic bacterial community in two different depths of Chinampa soil and its capacity of cellulose degradation
- 244 Martina Caplice - Biological resilience in Irish arable soils under different tillage practices
- 245 Yazmin Carreon-Abud - Seasonal changes of microbial population from the rizosphere of avocado plants, in orchards of organic management and orchards of traditional management, in Michoacán, México.
- 246 Hector Castro - Effect of switchgrass cultivar type, nitrogen fertilization and land management in microbial abundance and processes
- 247 Antonis Chatzinotas - How does land use influence protistan predators of bacteria?
- 248 Dominika Chmolowska - The differences in the structure of soil microbial communities in two types of grassland ecosystem: fallows and meadows
- 249 Maude David - Impact of soil, plants and growth conditions on the *Arthrobacter chlorophenolicus* proteome.
- 250 Marjan de Boer - Integrated approach in controlling soil-borne diseases in ornamental crop production
- 251 Montserrat Díaz-Ravina - PLFA and PICT analyses to detect microbial community changes in Cu-contaminated vineyard soils
- 252 Murat Durmus - Microbial biomass carbon and organic carbon content in soil aggregates from different soil types
- 253 Jonas Ghyselincx - Screening for antagonistic and plant growth promoting properties in bacteria isolated from the Central Andean Highlands
- 254 Silvia Gschwendtner - Effects of a genetically modified potato line with altered starch metabolism on carbon fluxes within the plant-soil system and on microbial community structure and function in the rhizosphere
- 255 Ahlam Hamim - Isolation and morphological characterization of arbuscular mycorrhizal fungi colonized by potato (*Solanum Tuberosum* L.) roots cultivated under different cropping systems in north of Morocco.
- 256 Petra Havlíčková - Dissemination of tetracycline-resistance determinants from cattle excrements to the soil

- 257 Petr Heděnek - Effect of large scale production of Rumex Uteusa on microbial activity and composition of soil microbial community
- 258 Michael Hemkemeyer - Impact of ortho-phenylphenol on soil bacteria and processes
- 259 Laetitia Herrmann - Is genetic diversity of native rhizobia nodulating promiscuous soybean variety (TGx 1740-2F) affected by cropping system or applications of N and culture residues in Meru South - Kenya?
- 260 Soňa Javoreková - Mycological characterization of soil in long term fold–grazing pastures in national parks of Slovakia
- 261 Prabhat Jha - Assessment and Characterisation of Associative Mineral Phosphate Solubilising Bacteria Isolated from Plants Growing in Zinc Mine
- 262 Dragana Josic - Intercropping influence of radish (*Raphanus sativus*) on indigenous rhizobia diversity in nodules of common beans (*Phaseolus vulgaris*)
- 263 Heli Juottonen - Cropping system diversity affects denitrification activity, N₂O flux and bacterial communities in agricultural soil
- 264 Ondřej Komžák - Characterization of strains antagonistic to pathogenic streptomycetes causing common potato scab
- 265 Elmarie Kotze - Effect of land use on soil humic substances in different semi-arid agro-ecosystems in the Free State Province, South Africa
- 266 Martina Kyselkova - Antibiotic resistance and presence of tetracycline resistance determinants tet(V) and tap in diverse fast-growing mycobacteria from agricultural soils and clinical isolates
- 267 Jean-Christophe Lata - Impact of the use of wastewater for irrigation of cultivated plots on the soil microbiological quality in semi-arid zone (Tunisia): approaches at the plot and catchment area scales
- 268 Cristina Lazcano - Short-term effects of the integrated use of organic and inorganic fertilizers in soil microbial communities and biological quality
- 269 Eliana Lemos - Bacterial diversity from soils of sugarcane crop and native forest in Sao Paulo State Brazil
- 270 Ana Lopes - Influence of rice plants (*Oryza sativa*) on the cultivable microbial population and functional activity of bulk paddy soil.
- 271 Claudia Lüke - Unraveling the pmoA diversity in paddy soils
- 272 Dror Minz - Irrigation with treated wastewater shifts microbial community structure and function in soil
- 273 Julia Moll - Temporal and spatial variation of general fungal and arbuscular mycorrhizal communities in a maize field
- 274 Monica Odlare - Organic wastes as fertilizer – focusing on sewage sludge, compost and biogas residues
- 275 Elisa Pellegrino - Composition and structure of arbuscular mycorrhizal fungal communities originating from a low-input agricultural soil as shown by T-RFLP and sequence analysis
- 276 Michele Pereira e Silva - Abundance, diversity and functional role of ammonia oxidizing communities across Dutch soils
- 277 Marijana Pesakovic - Influence of integrated and conventional production systems on development of soil microorganisms and strawberry field
- 278 Karin Potthast - Land-use change and pasture-fertilization affects soil microorganisms and nutrient cycling in a tropical mountain rainforest region of Southern Ecuador
- 279 Jesse Sadowsky - Carbon and nutrient cycling and beneficial microorganisms in organic and conventionally managed blueberry soils in Michigan, USA.
- 280 Zuzana Samková - Characterization of soil bacterial communities suppressing or promoting common potato scab
- 281 Zuzana Selešiová - Effects of benomyl and prometryn on soil microorganism diversity and activity in grazing-degraded soil
- 282 Hannes Schmidt - Investigation of microorganisms in characteristic root zone areas (RZA) of a paddy soil
- 283 Hong-Gyu Song - Effect of application of rhizobacteria on growth promotion of *Xanthium italicum* and bacterial community in barren lakeside soil
- 284 Andrew Spiers - Surfactants expressed by soil *Pseudomonas* spp. alter local water distribution suggesting a non-biological role for these compounds.
- 285 Anastasia Starodubtseva - Soil microbial communities under sown grasslands inoculated with symbiotic and associative nitrogen fixators in Central Non-Chernozem region
- 286 Agnieszka Szturc-Koetsier - The baseline across soils: transformation of plant-borne organic matter
- 287 Dung Tran - The effect of crop rotation on the structure of the bacterial community colonising rice straw residues in rice cultured soil in the Mekong delta of Vietnam
- 288 Menno van der Voort - Discovery of novel microorganisms and antimicrobial traits in natural disease suppressive soils
- 289 Allana Welsh - Microbial diversity affects soil functional operating range
- 290 Lina Wong - Genetic diversity of pyrrolnitrin (PRN) biosynthesis in bacteria isolated from Amazonian soils
- 291 Hasan Yilmaz - Naturally growing geophytes in cold climate regions: A case study from Turkey

Microbial Diversity and Processes in Forest Soils

- 292 Emily Austin - The Temperature response of fungal activity varies across stages of wood decomposition.
- 293 Adam Bahr - Growth of ectomycorrhizal fungi along a nitrogen deposition gradient and its effect on nitrogen leakage
- 294 Jiří Bárta - Response of denitrifying bacteria on nitrate addition in acidified spruce forest soil
- 295 Fabiana Cannavan - Microbial community structure in the Amazonian Dark Earth soils by pyrosequencing analyses: the role of biochar in the N-cycling and sustainability of tropical soils
- 296 Jim Germida - Diversity of ammonium oxidizing bacteria in relation to ammonium and nitrate fluxes in harvested forest soils of the Boreal Plain, Alberta Canada

- 297 Erika Gomoryova - Relationships between soil microbial community, vegetation and abiotic environment in a temperate virgin forest
- 298 Lelde Grantina - Monitoring of Seasonal Changes of Northern Temperate Zone Spruce Forest Soil Microbial Populations
- 299 Sue Grayston - Microbial and faunal communities in coastal forests of British Columbia and their response to variable-retention harvesting
- 300 Jessica Gutknecht - Soil microbial and nematode communities in response to different levels of temperate tree diversity
- 301 Veronika Hrdinková - Antibiotic production and resistance in actinobacteria at soil site with a long-term heavy metal contamination
- 302 Dalia Janusauskaite - Impact of native *Pinus sylvestris* L. and alien *Pinus mugo* needle litter decomposition on soil microbial properties of young soils formed from dune sands in Lithuania
- 303 Jindřich Karásek - Concurrent occurrence of bacteria, actinobacteria and selected genes of secondary metabolites along a gradient of differing redox conditions in a fishpond littoral
- 304 Mónika Knáb - Studies on soil microbial communities from two different Hungarian karstic areas
- 305 Ondřej Koukol - Shifts in microfungus community during the snow-melting; a case study in pine litter
- 306 Ariana Kubartova - New insights into wood-fungi ecology
- 307 Marcio Lambais - Artificial neural network modeling of microbial community structures in soils from the Atlantic forest of Brazil
- 308 Cendrella Lepleux - Taxonomic and functional characterization of the mineral associated bacterial communities in forest soil.
- 309 Didier Lesueur - The absence of significant influence of soil properties on the structure of fungal communities across land-use types in Mau Mount (Kedowa, Kenya)
- 310 Agnieszka Medyńska-Juraszek - Composition and activity of the microbial communities in forest floor exposed to deposition from copper industry
- 311 Lucas Mendes - Functional gene diversity in Amazonian Dark Earth soils and their black carbon
- 312 Shinjini Mukherjee - Bacterial response to oil in forest soil planted with aspen (*Populus*): abundance of degraders with structural and functional diversity display a dynamic treatment specific microbial process
- 313 Astrid Näther - Identification of soil bacteria assimilating carbon from ¹³C-labelled wheat residue by RNA-based Stable Isotope Probing
- 314 Acacio Navarrete - Real-Time PCR detection of Acidobacteria and Verrucomicrobia in bulk and soybean rhizosphere soils from Southeastern Brazilian Amazon arable fields
- 315 Laiye Qu - Effects of plant coverage on microbial community and soil aggregates in the Upper Minjiang River arid valley
- 316 Nicholas Rosenstock - The role of soil chemistry and parent material in determining microbial community composition and activity.
- 317 Mathieu Santonja - Does plant diversity affect microbial communities associated with leaves decomposing in a Mediterranean deciduous forest?
- 318 lingling Shi - Plant litter manipulations change forest soil fungal communities, but not those of bacteria
- 319 Anna Temraleeva - Toxicity of lead nitrate and acetate to the soil alga *Chlorella mirabilis* in relation to the medium composition
- 320 María Touceda-González - Bacterial communities in rhizosphere of different populations of the Ni-hyperaccumulator *Alyssum pintodasilvae* and the metal-excluder *Dactylis glomerata* growing in serpentine soils
- 321 Stephane Uroz - Mineral weathering by forest soil bacterial communities: from function to diversity
- 322 Lucia Žifčáková - Identification of *cbh1* cellobiohydrolase genes in litter-decomposing fungi and in the spruce forest soil

Microbial Biodegradation Processes

- 323 Yeonghee Ahn - Indigenous perchlorate-removal microorganisms in industrial complexes in Korea
- 324 Tobias Arnstadt - Patterns of lignin degradation and oxidative enzyme secretion by different wood- and litter-colonizing basidiomycetes and ascomycetes grown on beech wood
- 325 Thomas Banitz - Bacterial dispersal networks enhance biodegradation in heterogeneous environments
- 326 Clarissa Booth - Pathogenic Prion Protein Degradation by Bovine Manure Proteases
- 327 Maria Brennerova - Who will clean up the environment from polychlorinated biphenyls?
- 328 Monika Čvančarová - White rot fungi for the degradation of xenobiotics – screening of fungal strains for most efficient bioremediation of antibiotics, drugs, and ingredients of personal care products
- 329 Domenico Davolos - Potential bioremediation of phenol contaminated soils by the novel phenol degrading *Acinetobacter* sp. MO (LMG 25813T) and *Acinetobacter* sp. G16 (LMG 26030T).
- 330 Tinatin Doolotkeldieva - Microbial community structure in petroleum contaminated and uncontaminated soil of mountain ecosystem.
- 331 Sebastian Elgueta - Ligninolytic enzymes activities of white-rot fungus *Anthraco-phyl-llum discolor* for biodegradation of atrazine
- 332 Susan Foss - Influence of Fungal Networks on the Bioavailability of Polycyclic Aromatic Hydrocarbons to Bacteria in Water Unsaturated Environments
- 333 Miriam Guivernau Ribalta - Bacterial-fungal community dynamics during the bioremediation of an aged hydrocarbon-contaminated soil
- 334 Franz Hadacek - Polysaccharide degradation in sterile and non-sterile soils
- 335 Bjoern Hoppe - Wood decay and the diversity of wood-inhabiting fungi along forest management gradients in the German Biodiversity Exploratories
- 336 Marcus Horn - Sphingomonadaceae (Alphaproteobacteria) are Key 4-Chloro-2-Methylphenoxyacetic Acid Herbicide Degraders in Soil and Drilosphere

- 337 Steffen Kolb - Redox Potential Drives Activity of Cellulolytic and Saccharolytic Soil Bacteria
- 338 Marek Koutny - Biodegradation of synthetic polymers: application of TGGE
- 339 Zdena Křesinová - In vivo and in vitro biodegradation of 17 β -ethinylestradiol by the ligninolytic fungus *Pleurotus ostreatus*
- 340 Martin Kucklick - Unexpected causes of limited hydrocarbon degradation in a soil poor in nutrients
- 341 Mary-Cathrine Leewis - Investigating carbon flow through a PCB-degrading soil community using stable isotope probing
- 342 Salvador Lladó - Effect of bioaugmentation with ligninolytic fungi on Polycyclic aromatic hydrocarbons-biodegradation and on microbial community in an aged creosote-polluted soil
- 343 Tomáš Macek - MS MALDI-TOF-based screening of cultured biphenyl-degraders from horseradish rhizosphere soil contaminated by polychlorinated biphenyls
- 344 María Markúsdóttir - The microbial ecology of Glerá, a sub-Arctic river, from pristine source to contaminated estuary.
- 345 Daryl Moorhead - Untangling microbial and litter quality controls on decomposition for a mechanistic model of decay
- 346 Milan Muzikář - The effect of plant-pretreatment on the PCB degradation during composting
- 347 Aura Nousiainen - Validation of quantitative PCR for atrazine degradation genes in two different soils
- 348 Jessica Olcina Ibáñez - Earthworms modify microbial community structure and accelerate decomposition of grape marc during vermicomposting: Part I
- 349 Margreet Oosterkamp - Physiology of *Alicyclophilus denitrificans* strain BC, a bacterium that can degrade benzene with chlorate
- 350 Iva Pacovská - Microbial degradation of chlorinated pesticides
- 351 Martina Plačková - Ligninolytic enzyme production by *Trametes versicolor* during PCB degradation
- 352 Svetlana Prudnikova - Biodegradation of polyhydroxyalkanoates by soil microorganisms
- 353 Camille Secher - Quantification of the PCB-degrading bacteria *Burkholderia xenovorans* LB400 in contaminated soils by a real-time PCR (RT-PCR) targeting an ITS sequence.
- 354 Stephan Schulz - Abundance, activity and diversity of alkB harbouring bacteria in different soil layers during plant litter decay
- 355 Michal Strejček - Study of microbial diversity in soil contaminated by PCB as a consequence of plant presence
- 356 Petr Štursa - Identification of cultivable and non-cultivable rhizosphere bacteria from long term contaminated soil by polychlorinated biphenyls
- 357 Kateřina Svobodová - Microbial diversity and antifungal activity during composting of organic waste
- 358 Francisco Javier Vilarino Castro - Earthworms modify microbial community structure and accelerate decomposition of grape marc during vermicomposting: Part II
- 359 Blanka Vrchotová - Cooperation of plant and bacteria on chlorobenzoic acids metabolisation
- 360 Jana Vrkoslavová - Potential of rhizospheric bacteria associated with *Nicotiana tabacum* to degrade PBDEs

Methods in Soil Microbial Ecology: Challenges and Limitations

- 361 Laura Giagnoni - Proteomic analysis of *Cupriavidus metallidurans* CH34 in copper contaminated and phytoremediated soil
- 362 Ton Gorissen - U13C Plant Materials expand probing capacities in complex ecosystems: New developments in stable isotope applications
- 363 Grit Kabiersch - A novel method to determine enzyme activities in solid media suitable for small sample volumes
- 364 Katharina Keiblinger - Comparison of extraction protocols to analyze the metaproteome of two different soil types.
- 365 Václav Křišťůfek - Use of the HRSEM, CryoHRSEM and TEM microscopy for viewing of microorganisms in soil
- 366 Martin Krsek - Isolation of extracellular soil DNA
- 367 Petra Lovecká - The effect of organochlorinated pesticides to microbial diversity
- 368 Lorenzo Menichetti - In situ determination of long term (>50y) changes in $\delta^{13}C$ signature of Soil Organic Matter in a cool temperate climate
- 369 Maarja Opik - Molecular biogeography of arbuscular mycorrhizal fungi (Glomeromycota)
- 370 Stefanie Wallisch - Improved protocol for the simultaneous extraction and column-based separation of DNA and RNA from different soils

Poster dimensions should not exceed 90 cm (width) x 150 cm (height)

Posters 69-220 will be displayed on Thursday, April 28, posters 221-370 on Friday, April 29

Posters can be pinned up from 8:00 and must be collected before 20:00