

ROOT-BENEFIT Symposium on

"Strategies for Bridging Knowledge and Application"

https://www.root-benef

Final Programme

Wednesday 21 May 2025

9:30 Poster mounting

9:45 Introduction

10:00 WG1 session

10:00 keynote lecture. **Natacha Bodenhausen** (FiBL, Switzerland) - **Microbiome-Driven Agriculture:** From Synthetic Communities to Predictive Soil Indicators

10:30 keynote lecture. Claire Stanley (Imperial, UK) - SOIL-ON-A-CHIP: Exploring below-ground interactions using microfluidic technology

11:00 Matheus Nicoletti Marascalchi (Czech Republic) - Towards a Comprehensive AMF Reference Sequence Database: Insights from 2.5kb rDNA Amplicon Sequencing

11:15 Mahreen Yahya (Germany) - Microbial Engineering for Climate-Resilient Wheat: Enhancing Phosphorus Uptake and Stress Tolerance

11:30 - 12:00 coffee break

12:00 Irena Maček (Slovenia) - Succession of arbuscular mycorrhizal fungal communities in remediated soils after inoculation

12:15 **Steffen Kolb** (Germany) - *Microbiomes in Cereal Crop production* 12:30 **Emma Fuller** (Ireland) - *Exploring Root-Associated Microbes to Combat Phytophthora alni-*

Induced Alder Dieback

12:45 Pascale Flury (Switzerland) - Understanding the compost-mediated suppression of soilborne diseases: The value of high resolution sequencing

1:00 - 2:00 Lunch

2:00 WG2 session

2:00 keynote lecture. **Sofie Goormachtig** (VIB-Ghent University, Belgium) - **How do rhizobacteria promote plant growth? All roads lead to Rome**

2:30 keynote lecture. **Rene Geurts** (WUR, The Netherlands) - **Evolution of a NIN-LIKE PROTEIN into a Master Regulator of Nitrogen-Fixing Nodulation**

3:00 Loukia Kellari (Greece) - A Fusarium solani root-colonizing fungus used for the dissection and exploitation of beneficial plant-fungal interactions

3:15 Valerio Mattei (Italy) - *Investigating the interaction of streptomycetes with plants using omics approaches: from the efficacy to the mode of action.*

3:30 - 4:00 coffee break

4:00 Florian Frugier (France) - Local and systemic regulation of nodulation in Medicago truncatula

4:15 Jorge Martín-García (Spain) - Trichoderma-chickpea interaction: induction of systemic hormonal and metabolomic responses for effective control of rabies (Ascochyta rabiei)

4:30 Victor Flors (Spain) - Mycorrhiza-Induced Resistance: a story of resilience

4:45 María Soledad Sacristán Benayas (Spain) - Role of benzoxazinoids in maize colonization and growth promotion by the fungal endophyte Colletotrichum tofieldiae

5:00 Didier Reinhardt (Switzerland) - Sanctioning of inefficient rhizobia by Medicago truncatula

Dinner in Berlin







ROOT-BENEFIT Symposium on

"Strategies for Bridging Knowledge and Application"

https://www.root-bene

Thursday 22 May 2025

9:30 WG3 session

9:30 keynote lecture. **Thomas Kuyper** (WUR, The Netherlands) - **Ecosystem services provided by** arbuscular mycorrhizal fungi: economic versus ecological valuation

10:00 keynote lecture. **Vítor João Pereira Domingues Martinho** (Polytechnic Institute of Viseu, Portugal) - **Economic evaluation of beneficial microbes and ecosystem services: Methodologies, challenges and examples**

10:30 Sharon Zytynska (UK) - Uncovering functional diversity in plant-beneficial rhizobacteria: enhancing plant defences and multitrophic interactions

10:45 **Sabina Jafarzadeh** (Azerbaijan) - **Evaluating Ecosystem Services of Arbuscular Mycorrhizal Fungi: Economic vs. Ecological Perspectives in Root Systems**

11:00 - 11:30 coffee break

11:30 Jan Jansa (Czech Republic) - On the interactions between arbuscular mycorrhizal fungi and nitrification microorganisms in soils

11:45 Georgios Leventis (Greece) - Community-based plant specific microbial consortia: a microbiome-based tool to enhance plant fitness and soil functions in ecosystem restoration of quarry deposits in Milos (Greece)

12:00 Jelena Lazarević (Montenegro) - Beneficial fungi in pine forests on upper tree line under the climate change

12:15 Fevzi Elbasan (Turkey) - Microbial Allies in the Drought Battlefield: Reviving Nitrogen Metabolism in Maize

12:30 - 1:30 Poster session

1:30 - 2:30 Lunch

2:30 WG4 session

2:30 keynote lecture **Vasils Kokkoris** (Vrije Universiteit Amsterdam) - **Cell and Network Dynamics in Arbuscular Mycorrhizal Fungi**

3:00 keynote lecture Birgit Mitter (Ensemo GmbH) From Lab to Market: How We Applied Scientific Knowledge to Drive Innovation

3:30 Myrto Tsiknia (Greece) - Investigating the application of single, mixed and whole community microbial inocula to improve plant performance and fitness and to restore soil functions of degraded ecosystems.

3:45 Juan Ignacio Vílchez (Portugal) - Environmental and Human Safety Index (EHSI): A harmonized biosafety protocol for Plant Growth-Promoting Bacteria

4:00 - 4:30 coffee break

4:30 Isabel Brito (Portugal) - Crop Management Strategies for Enhancing Soil Microorganisms and Sustainable Food Production

4:45 Effimia Papatheodorou (Greece) - The effects of microbial inoculants on plant growth and rhizosphere microbial communities







ROOT-BENEFIT Symposium on

"Strategies for Bridging Knowledge and Application"

https://www.root-benefi

5:00 **Leo van Overbeek** (The Netherlands) - *The search for molecular markers indicating root growth stimulation by microbes*

5:15 Ibrahim Ortaş (Turkey) - Plant root growth and mycorrhizal infection capacities of zinc (zn) deficient and tolerant wheat genotypes

5:30 Ayrton Andre Rosado Huaynasi (Sweden) - Beneficial root-associated microorganisms and the Law: Insights from the European Union legal framework towards a sustainable agriculture

5:45 General information about the Action

6:15 Closing and poster removal



