

Detailed Program

DAY 1 | 23. Nov. | 12^{A.M.} – 6^{P.M.}

10:00 – 12:00	Arrival, registration, lunch
12:00 – 12:15	WELCOME
12:15 – 12:45	OPENING STATEMENT Jeroen Meeussen (EU Minor Uses Coordination Facility, FR) How to integrate microbial solutions in sustainable agriculture
12:45 – 13:30	OPENING LECTURE Joseph Kloepper (Auburn University, US) Current Agricultural Uses and Research Directions for Microbial Inoculants
SESSION 1	SfAM SESSION: SUCCESSFUL MICROBIAL PRODUCTS
13:30 – 14:30	
13:30 – 14:00	Ilaria Pertot (Fondazione Edmund Mach, IT) Can microbial biofungicides play better than chemicals?
14:00 – 14:30	Linda Johnson (AgResearch Ltd, NZ) The exploitation of <i>Epichloë</i> endophytes for agricultural advantage
14:30 – 15:00	Coffee break
SESSION 2	NEED FOR MICROBIAL SOLUTIONS
15:00 – 16:00	
15:00 – 15:30	Stéphane Declerck (Université catholique de Louvain, BE) Microbial solutions to agro-environmental challenges in a changing world
15:30 – 15:45	Fabricio Cassán Use of bio-products to improve crop productivity. The success model of Argentina
15:45 – 16:00	Friederike Trognitz Plant-associated microorganisms as bioherbicides: A sustainable alternative for weed management

SESSION 3	COLONIZATION AND MECHANISMS OF BENEFICIAL PLANT-MICROBE INTERACTIONS
16:00 – 18:15	
16:00 – 16:30	Marc Ongena (Gembloux Agro-Bio Tech/University of Liège, BE) Impact of root- <i>Bacillus</i> molecular interactions on the production of biocontrol metabolites
16:30 – 17:00	Choong-Min Ryu (KRIBB, KR) Functional metagenome mining for prompting plant systemic defense
17:00 – 17:30	Stéphane Compant (AIT Austrian Institute of Technology, AT) Endophytic bacteria: ecology, niches, colonization behavior, and use for biofertilizer/biocontrol approaches
17:30 – 17:45	Magnus Karlsson The glyoxylate and methylcitrate cycles are involved in antagonism, root colonisation and induction of plant systemic defence in the fungal biocontrol agent <i>Trichoderma atroviride</i>
17:45 – 18:00	Walter Patricio Luzuriaga Ioaiza Elicitation of host immunity by plant beneficial bacilli: insights into the molecular basis of surfactin perception
18:00 – 18:15	Eddie Cytryn Novel genomic tools for evaluating and tracking rhizosphere competence in biocontrol and plant growth promoting rhizobacterial strains
18:30 – 20:30	WELCOME RECEPTION

DAY 2 | 24. Nov. | 9^{A.M.} – 6:30^{P.M.}

SESSION 3	COLONIZATION AND MECHANISMS OF BENEFICIAL PLANT-MICROBE INTERACTIONS
09:00 – 10:30	
09:00 – 09:15	Andrea Campisano Can insect pests be vectors of beneficial endophytes?
09:15 – 09:30	Henry Müller Employing multi-omics to elucidate beneficial traits of the plant-associated bacteria <i>Stenotrophomonas rhizophila</i> and <i>Pseudomonas poae</i>
09:30 – 09:45	Anton Hartmann <i>Rhizobium radiobacter</i> F4, the endomycotic bacterium in the plant growth promoting fungus <i>Piriformospora indica</i> , is an endophytic PGPB itself
09:45 – 10:00	Thomas Ledger <i>Arabidopsis thaliana</i> growth and salinity tolerance induction by <i>Burkholderia phytofirmans</i> PsJN: specific plant responses to bacterial emission of a blend of volatile signals
10:00 – 10:30	POSTER TALKS: <u>Adam Schikora</u> : <i>The beneficial effect of plant-associated bacteria are based on quorum sensing molecules</i> <u>Cecilia Taulé</u> : <i>Characterization of sugarcane (native) plant growth promoter strains</i> <u>Jesús Mercado-Blanco</u> : <i>Pseudomonas fluorescens PICF7, an olive root endophyte with biocontrol and plant-growth promotion abilities</i> <u>Giulia Molinatto</u> : <i>Features of Bacillus amyloliquefaciens S499 involved in rhizosphere interactions: a genomic approach</i> <u>Gajender Aleti</u> : <i>A gene cluster coding for iturin like lipopeptide from Paenibacillus polymyxa</i> <u>Jaka Razinger</u> : <i>Exploiting rhizosphere competence of entomopathogenic or insect associated fungi to enhance crop resistance to soil pests</i>
10:30 – 11:00	Coffee break
SESSION 4	INVOLVEMENT OF MULTITROPHIC AND MICROBIOME INTERACTIONS
11:00 – 12:00	
11:00 – 11:30	Jos Raaijmakers (Netherlands Institute of Ecology, NL) Back to the roots: microbiology and chemistry at the root-soil interface
11:30 – 12:00	Kornelia Smalla (Julius-Kühn-Institute, DE) Environmental factors influencing fate and activity of bacterial inoculants and their effect on the indigenous microbial community in the rhizosphere
12:00 – 14:00	Lunch break & Poster session 1

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SESSION 4 INVOLVEMENT OF MULTITROPHIC AND MICROBIOME INTERACTIONS

14:00 – 16:00

14:00 – 14:15 **Lionel Moulin**

Soil, wheat genotype and their interaction impact patterns of PGP properties of culturable endophytic bacteria

14:15 – 14:30 **Sebastian Baier**

Rhizosphere and endophytic microbial communities and plant transcriptome response in rose replant disease

14:30 – 14:45 **Tom Viaene**

Exploration and exploitation of the maize endosphere

14:45 – 15:00 **Matthieu Barret**

Diversity and dynamics of seed-associated microbial assemblages

15:00 – 15:15 **Olaf Tyc**

The influence of inter-specific bacterial interactions on secondary metabolite production and antimicrobial activity

15:15 – 15:30 **Armin Erlacher**

Novel insights into the microbiomes of leafy greens and the key role of *Enterobacteriaceae*

15:30 – 16:00 POSTER TALKS:

Paula Baptista: *Relationships between endophytic fungal communities and olive tree resistance to anthracnose*

Christina Morauf: *Host-specific composition of Alphaproteobacteria in the Vitis phyllosphere reveals potential for antagonistic candidates against Plasmopara viticola*

Cátia Pinto: *Grapevine microbiome: a challenge to identify beneficial microorganisms for grapevine protection*

Christin Zachow: *Decoding the sugar beet seed and rhizosphere microbiome for biocontrol of Rhizoctonia solani*

Milko Jorquera: *Contribution of bacterial consortia on salt stress tolerance of avocado (Persea americana Mill.) seedlings grown in a commercial orchard*

Luhua Yang: *Active community profile of bacterial endophytes in barley root*

16:00 – 16:30 **Coffee break**

SESSION 5 MICROBIAL APPLICATIONS FROM LAB TO FIELD

16:30 – 18:30 **(including Bioprospection)**

16:30 – 17:00 **Christopher Franco (Flinders University, AU)**

Ground reality: do endophytes offer an advantage in the field?

17:00 – 17:30 **Gabriele Berg (Graz University of Technology, AT)**

Microbiome control: translating innovations from lab to field

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- 17:30 – 17:45 **John Caradus**
Deciphering fungal behaviour – the link between endophyte biology and efficacious biological control agents
- 17:45 – 18:00 **Kelly Craven**
Sebacina vermifera: a unique root symbiont with vast agronomic potential
- 18:00 – 18:15 **David Ezra**
The use of the endophytic fungus *Daldinia concentrica* and its volatiles as a biocontrol agent
- 18:15 – 18:30 **Wisnu Adi Wicaksono**
Bioprospecting of endophytic bacteria from a native New Zealand medicinal plant, *Leptospermum scoparium*: bioactive and transmissibility to commercial plants
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- 18:45 – 23:00 **SOCIAL EVENT: Sightseeing bus tour + Dinner in Vienna Townhall (separate registration necessary)**

DAY 3 | 25. Nov. | 9^{A.M.} – 5:30^{P.M.}

SESSION 5 09:00 – 10:00	MICROBIAL APPLICATIONS FROM LAB TO FIELD (including Bioprospection)
09:00 – 09:15	Mette H. Nicolaisen New isolation technique for enhanced in situ performance of 2 nd generation plant growth promoting microorganisms
09:15 – 09:30	Soumitra Paul Chowdhury Interactions of <i>Bacillus amyloliquefaciens</i> FZB42 with <i>Rhizoctonia solani</i> in the lettuce rhizosphere: from lab to the field and back
09:30 – 10:00	POSTER TALKS: <u>Adnan Akhter</u> : <i>Development of Fusarium oxysporum f. sp. lycopersici, mycorrhization and alteration in root exudation of tomato in compost and biochar amended soil</i> <u>Hatice Özactan</u> : <i>The using possibilities of bacterial endophytes as biostimulant and biopesticide in cucumber growing</i> <u>Peteh Mehdi Nkebiwe</u> : <i>Placement of Pseudomonas sp. PRORADIX around NH₄⁺-based fertilizer depots in maize stimulates root exploitation of the fertilizer depot</i> <u>Beatriz Ramos Solano</u> : <i>From the lab to the field: root inoculated Bacillus triggers plant defensive metabolism compromising blackberry (Rubus var. Loch Ness) fruit yield improvement upon pathogen attack</i> <u>Siegrid Widhalm</u> : <i>Isolation and functional characterization of bacteria associated to common ragweed and their utilization as biocontrol agent</i> <u>László Kredics</u> : <i>BioeGO: a new soil inoculant based on the combined application of beneficial bacteria and fungi</i>

SESSION 6 10:00 – 11:00	APPLICATION TECHNOLOGIES AND FORMULATIONS
10:00 – 10:30	Yoav Bashan (CIBNOR, MX and Auburn University, US) Inoculant formulations are essential for successful inoculation with plant growth-promoting bacteria
10:30 – 11:00	Sebastian Håkansson (Swedish University of Agricultural Sciences /Captigel, SE) Trials and tribulations of microbial formulation
11:00 – 11:30	Coffee break

SESSION 6 11:30 – 12:00	APPLICATION TECHNOLOGIES AND FORMULATIONS
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11:30 – 11:45	Ana Bejarano Desiccation: a major issue. How to maintain cell viability during storage in dry formulations?
11:45 – 12:00	Desiree Jakobs-Schönwandt Application techniques of fungal biocontrol endophytes
12:00 – 12:15	Birgit Mitter EndoSeed™: A new technology to generate endophyte-improved seed
12:15 – 14:00	Lunch & Poster session 2
14:00 – 15:00	ROUNDTABLE DISCUSSION BENEFITS AND POTENTIAL CONCERNS FOR CONSUMERS AND FARMERS With representatives from companies, national and international policy makers, NGOs, and farming associations
SESSION 7 15:00 – 15:30	REGISTRATION REQUIREMENTS OF MICROBIAL PRODUCTS
15:00 – 15:30	Falko Feldmann (Julius-Kühn -nstitute Berlin, DE) Registration of microbial products
15:30 – 16:00	Coffee break
16:00 – 16:45	CLOSING LECTURE Ben Lugtenberg (Leiden University, NL) Role of microbes in sustainable crop production: challenges and promises
16:45 – 17:15	Wrap-up and conference conclusions
17:15	Closure