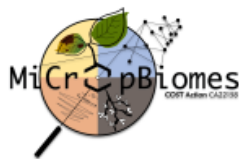


2nd Annual Conference of the MiCropBiomes COST Action

**Exploiting Plant-Microbiomes Networks and
Synthetic Communities to Improve Crops Fitness**

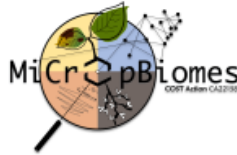


Conference Overview

Registration: Tuesday 8:30 – 9:15 am

Welcome: Tuesday 9:15 am – 9:45 am

Tuesday 17 th June	Wednesday 18 th June	Thursday 19 th June
<p>9:45 – 10:30</p> <p>Session 1</p> <p>Exploiting plant-microbiome molecular crosstalks: Diversity, distribution, and eco-evolutionary perspectives</p>	<p>8:45 – 10:30</p> <p>Session 4</p> <p>Crop-microbiome assembly dynamics under specific environments</p>	<p>9:00 – 11:00</p> <p>Management Committee meeting</p>
Break	Break	Break
<p>11:00 – 12:15</p> <p>Session 1</p> <p>Exploiting plant-microbiome molecular crosstalks: Diversity, distribution, and eco-evolutionary perspectives</p>	<p>11:00 – 12:00</p> <p>Session 5</p> <p>Communication and engagement with society</p>	<p>11:00 – 13:00</p> <p>Social program: Visit to the archaeological Site of Kourion</p>
	<p>12:00 – 12:30</p> <p>Shared experiences for STSM/funded trainees</p>	
Lunch	Lunch	
<p>14:00 – 15:45</p> <p>Session 2</p> <p>Crop microbiomes and plant diseases: From dysbiosis to increased defenses</p>	<p>14:00 – 15:30</p> <p>Working Group meetings</p>	
Break	Break	
<p>16:15 – 17:45</p> <p>Session 3</p> <p>From current microbial inoculants to synthetic communities</p>	<p>16:00 – 16:45</p> <p>Plenary conclusion WG1-WG5</p>	
	<p>16:45 – 17:30</p> <p>Glossary/Terminology session</p>	
	<p>17:30 – 18:30</p> <p>Posters session & Group picture</p>	
<p>20:00</p> <p>Congress dinner</p>		

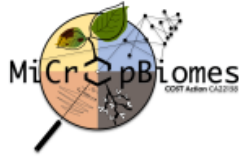


Local Organisers

Iakovos Pantelides	Cyprus University of Technology, Cyprus
Loukas Kanetis	Cyprus University of Technology, Cyprus
Maria-Dimitra Tsolakidou	Cyprus University of Technology, Cyprus
Stavroula Dimitriadi	Cyprus University of Technology, Cyprus
Styliana Efstathiou	Cyprus University of Technology, Cyprus

Scientific Committee

Conceição Santos	University of Porto, Portugal
Francesco Spinelli	University of Bologna, Italy
Ahmed Abdelfattah	ATB, Germany
Ellodie Vandelle	University of Verona, Italy
Joël Pothier	Zurich University of Applied Sciences, Switzerland
Anna Bonaterra	University of Girona, Spain
Caroline De Tender	Ghent University, Belgium
Gabriele Berg	TU Graz, Austria
Tanja Berić	University of Belgrade, Serbia
Gordana Racic	Research and Development Institute Tamiš, Serbia
Renata Artimová	Institute of Forest Ecology, Slovakia
Claire Prigent-Combaret	University of Lyon, France
Ralf Koebnik	IRD, Montpellier, France
Ivan Nikolic	University of Belgrade, Serbia
Iakovos Pantelides	Cyprus University of Technology, Cyprus
Loukas Kanetis	Cyprus University of Technology, Cyprus



Scientific Program

Tuesday 17th of June

08:30 – 09:15 Registration

09:15 – 09:45 Opening & Welcome by the organizers

Session 1 Exploiting Plant-Microbiome molecular crosstalks: Diversity, distribution, and eco-evolutionary perspectives

Chairs: Ahmed ABDELFAH and Gabriele BERG

Invited Lecture

9:45 – 10:15 **Gabriele BERG (Institute of Environmental Biotechnology, Graz University of Technology, AT):** Plant-Microbiome interactions under the lens of the one health concept

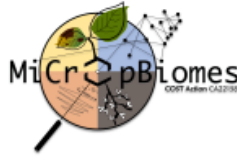
Oral Presentations

10:15 – 10:30 **Ahmed Abdelfattah (Leibniz Institute for Agricultural Engineering and Bioeconomy, DE):** Assembly and diversity of the fruit and seed microbiome sustainable Agriculture

10:30 – 11:00 *Break*

11:00 – 11:15 **Benjamin Dubois (Walloon Agricultural Research Centre, BE):** Improving plant microbiome profiling: host-DNA blocking strategies and high-accuracy long-read bioinformatics pipeline for Nanopore data

11:15 – 11:30 **Salme Timmusk (Swedish University of Agricultural Sciences, SE):** Plant-microbiome interactions under a changing world



- 11:30 – 11:45 **Ioannis Stringlis (Agricultural University of Athens, GR):** Lessons from model and crop plants on plant-microbiome communication
- 11:45 – 12:15 General Discussion
- 12:15 – 14:00 *Lunch*

Session 2 Crop microbiomes and plant diseases: From dysbiosis to increased defenses

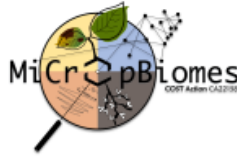
Chairs: Joël F. POTHIER and Renata ARTIMOVA

Invited Lecture

- 14:00 – 14:30 **Lili HUANG (Northwest A&F University, CN):** Bacterial Canker: Control vascular spread based seasonal dynamics of *Pseudomonas syringae* pv. *actinidiae* in Kiwi Plant

Oral Presentations

- 14:30 – 14:45 **Matthias Noll (University of Coburg, DE):** Future climate and agricultural farming systems affect the fungal plastisphere of different biodegradable plastics at the early stage of field degradation
- 14:45 – 15:00 **Lena Pesenti (UCLouvain, Earth and Life Institute, Applied Microbiology, Plant Health Lab, BE):** Assessing the role of Salicaceae xylem endophytes on the establishment and progression of *Xylella fastidiosa* or *Brenneria salicis*
- 15:00 – 15:15 **Duška Delić (University of Banja Luka, Faculty of Agriculture, BA):** Seed Microbiome Diversity in Balkan Legumes: Insights from *Lathyrus sativus* (Herzegovina) and *Phaseolus vulgaris* (Montenegro)



- 15:15 – 15:30 **Joanna Pulawska (The National Institute of Horticultural Research, Skierniewice, PL):** Universal properties of *Pantoea agglomerans* T16/8, *Pantoea allii* T14/15 strains in protecting fruit and vegetable plants against diseases
- 15:30 – 15:45 General Discussion
- 15:45 – 16:15 *Break*

Session 3 From current microbial inoculants to synthetic communities

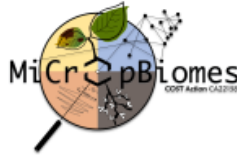
Chairs: Anna BONATERRA and Claire PRIGENT-COMBARET

Invited Lecture

- 16:15 – 16:45 **Blanca Landa (Institute for Sustainable Agriculture, Spanish National Research Council, ES):** Unravelling and engineering the olive xylem microbiome to enhance its resilience against vascular pathogens

Oral Presentations

- 16:45 – 17:00 **Lucía Alonso Villar (Institute for Sustainable Agriculture, Spanish National Research Council, ES):** Development of Synthetic Bacterial Communities (SynCom) with xylem-inhabiting bacteria for the biological control of vascular pathogens of olive crop
- 17:00 – 17:15 **Luca Nerva (Council for Agricultural Research and Economics - Research Centre for Viticulture and Enology, IT):** Microbiome-Mediated Adaptation: Leveraging Grape-Associated Microbiota to Boost Hologenome Plasticity under Climate Change
- 17:15 – 17:30 **Fares Bellameche (Department of Life Sciences, University of Modena & Reggio Emilia, IT):** Ensuring the efficacy of the biopesticide Microfighter: survival of *Pseudomonas synxantha*



DLS65 in diverse crops and its defense-stimulating role in grapevine

17:30 – 17:45 General Discussion

20:00 **Congress Dinner**

Wednesday 18th of June

Session 4 Crop-Microbiome assembly dynamics under specific environments

Chairs: Elodie Vandelle and Gordana Racic

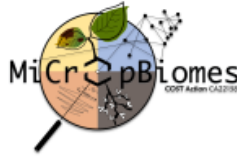
Invited Lecture

08:45 – 09:15 **Laura Weisskopf (Department of Biology, University of Fribourg, CH):** Chemical communication and its impact on the expression of biocontrol traits in plant-associated bacteria

Oral Presentations

09:15 – 09:30 **Wafa Achouak (Laboratory of Microbial Ecology of the Rhizosphere, Aix-Marseille Université-CEA-CNRS, Biosciences and biotechnology Institute of Aix-Marseille (BIAM), CEA Cadarache, FR):** Root exudates shape microbiota and rhizosheath formation in pearl millet: Implications for soil aggregation and carbon sequestration

09:30 – 09:45 **Bulbul Ahmed (African Genome Center, University Mohamed VI Polytechnic, MA):** Mapping the microbiome in extreme arid environments revealed microbial consortia with potential for saline stress tolerance



- 09:45 – 10:00 **Manikandan Ariyan (University of Tartu, EE):** Influence of tree mycorrhizal type and plant species identity on twig fungal communities
- 10:00 – 10:15 **Denise Khouri Chalouhi (International Centre for Genetic Engineering and Biotechnology (ICGEB) - Trieste Bacteriology Unit, IT):** An in-planta enrichment route to identify bacterial root endophytes
- 10:15 – 10:30 General Discussion
- 10:30 – 11:00 *Break*

Session 5 **Communication and engagement with society**

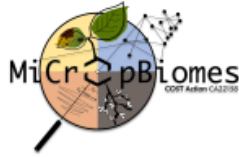
Chairs: Caroline DE TENDER and Ivan NIKOLIC

Invited Lecture

- 11:00 – 11:30 **Eiko Kuramae (Netherlands Institute of Ecology NIOO-KNAW, NL):** Harnessing engineered microbial consortia and metabolites for sustainable grain yield and quality

Oral Presentations

- 11:30 – 11:45 **Lara Amorim (Department of Biology, Faculty of Sciences, University of Porto, PT):** Engaging secondary school students in microbiome literacy: an international educational initiative by the WG5 Task Force
- 11:45 – 12:00 **Matthijs Van Hooste (Department of Biochemistry and Microbiology, Ghent University, BE):** Rooted in Resilience: Exploring the root & seed microbiome of sunflower for sustainable agriculture
- 12:00 – 12:30 Shared experiences for STSM/funded trainees



- 12:30 – 14:00 *Lunch*
- 14:00 – 15:30 Working Group Meetings – Parallel Sessions
- 15:30 – 16:00 *Break*
- 16:00 – 16:45 Plenary Conclusion WG1-WG5
- 16:45 – 17:30 Glossary/Terminology Session
- 17:30 – 18:30 Poster Session & Group Picture

Thursday 19th of June

- 09:00 – 11:00 – Management Committee Meeting
- 11:00 – 13:00 – Social Programme – Visit to the Archaeological Site of Kourion