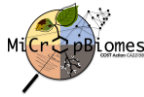


## 1<sup>st</sup> Annual Conference of the MiCropBiome COST Action

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



# Conference Overview

**Registration:** Wednesday 8:30 – 9:15 am

**Welcome:** Wednesday 9:15 – 9:45 am

Wednesday 11 <sup>th</sup> September	Thursday 12 <sup>th</sup> September	Friday 13 <sup>th</sup> September
<p><b>9:45 – 10:30</b></p> <p><b>Session 1</b></p> <p>Exploiting Plant-Microbiome molecular crosstalks: diversity, distribution and eco-evolutionary perspectives</p>	<p><b>8:45 – 10:30</b></p> <p><b>Session 4</b></p> <p>Crop-Microbiome assembly dynamics under specific environments</p>	<p><b>9:00 – 11:00</b></p> <p>Management Committee Meeting</p>
Break	Break	Break
<p><b>11:00 – 12:30</b></p> <p><b>Session 1</b></p> <p>Exploiting Plant-Microbiome molecular crosstalks: diversity, distribution and eco-evolutionary perspectives</p>	<p><b>11:00 – 12:00</b></p> <p><b>Session 5</b></p> <p>Communication, and engagement with society</p>	<p><b>11:00-13:00</b></p> <p><b>Social Programme - Natural History and Science Museum</b></p>
	<p><b>12:00 – 12:30</b></p> <p>Shared experiences for STSM/funded trainees</p>	
Lunch	Lunch	
<p><b>14:30 – 16:15</b></p> <p><b>Session 2</b></p> <p>Crop microbiomes and plant diseases: from dysbiosis to increased defenses</p>	<p><b>14:00 – 16:30</b></p> <p>Working Group Meetings</p>	
Break	<b>16:30 – 17:00</b>	
<p><b>16:45 – 18:15</b></p> <p><b>Session 3</b></p> <p>From current microbial inoculants to synthetic communities</p>	Plenary Conclusion WG1-WG5	
	<p><b>17:00 – 18:30</b></p> <p>Posters Session, Porto Wine Taste &amp; Group Picture</p>	
<p><b>19:00</b></p> <p><b>Congress Dinner</b></p>		





## Local Organisers

<b>Conceição Santos</b>	University of Porto, Portugal
<b>Maria Celeste Dias</b>	University of Coimbra, Portugal
<b>Joana Costa</b>	Instituto Pedro Nunes, Portugal
<b>Fernando Tavares</b>	University of Porto, Portugal
<b>João Prada</b>	University of Porto, Portugal
<b>Emil Gimranov</b>	University of Porto, Portugal
<b>Juliana Fernandes</b>	University of Porto, Portugal
<b>Marino Costa-Santos</b>	University of Porto, Portugal
<b>Paula Pinto</b>	University of Porto, Portugal

## Scientific Committee

<b>Ahmad Abdelfattah</b>	ATB, Germany
<b>Anna Bonaterra</b>	University of Girona, Spain
<b>Caroline De Tender</b>	Ghent University, Belgium
<b>Claire Prigent-Combaret</b>	University Lyon 1, France
<b>Conceição Santos</b>	University of Porto, Portugal
<b>Ellodie Vandelle</b>	University of Verona, Italy
<b>Francesco Spinelli</b>	University of Bologna, Italy
<b>Gabriele Berg</b>	TU Graz, Austria
<b>Gordana Racic</b>	Educons University, Serbia
<b>Joana Costa</b>	Instituto Pedro Nunes, Portugal
<b>Joël F. Pothier</b>	Zurich University of Applied Sciences, Switzerland
<b>Maria Celeste Dias</b>	University of Coimbra, Portugal
<b>Ralf Koebnik</b>	IRD, Montpellier, France
<b>Renata Artimová</b>	Institute of Forest Ecology, Slovakia





# Scientific Program

## Wednesday 11<sup>th</sup> of September

- 08:30-09:15     **Registration**
- 09:15-09:45     **Opening & welcome by the organizers**  
**Conceição Santos** (Chair)

### **Session 1     Exploiting     plant-microbiome     molecular crosstalks:     diversity,     distribution     and     eco- evolutionary     perspectives**

Chairs: Maria Celeste Dias & Joana Costa

#### **Invited Lecture**

09:45-10:15 – **Philippe Vandenkoornhuyse (Université de Rennes, FR):** The holobiont and hologenome concepts and related emerging ideas for the next agriculture

#### **Oral Presentations**

10:15-10:30 – **Alberto SPADA (CREA, Research Centre for Viticulture and Enology, IT):** Back to the holobiont: a journey through plant-microbe interactions for sustainable viticulture

*10:30-11:00 – Break*

11:00-11:15 – **Denis GUNIA (Leibniz Institute for Agricultural Engineering and Bioeconomy, DE):** The edible antibiotic resistomes of apples (Mandy apples and Golden Reinders)



11:15-11:30 – **Esmeralda DUSHKU (Veterinary Research Institute of Hellenic Agricultural Organization-DIMITRA, GR):** Integrated genomic and in planta assessment of novel plant growth-promoting rhizobacteria

11:30-11:45 – **Fabienne VAILLEAU (LIPME - INRAE , FR):** Highlighting plant and bacterial key genetic factors of the molecular dialog between plant growth-promoting bacteria and *Arabidopsis thaliana*

11:45-12:00 – **Mogens NICOLAISEN (Aarhus University, DK):** Microbe-mediated drought resilience in barley

12:00-12:30 – General Discussion

12:30-14:30 – Lunch

## **Session 2 Crop microbiomes and plant diseases: from dysbiosis to increased defenses**

Chairs: Joël POTHIER & Renata ARTIMOVÁ

### **Invited Lecture**

14:30-15:00 – **Vittorio VENTURI (African Genome Center, Mohammed VI Polytechnic University, MA):** Cell-cell bacterial signalling in the plant pathobiome and microbial solutions for a more sustainable agriculture

### **Oral Presentations**

15:00-15:15 – **Claude BRAGARD (UCLouvain, BE):** Unravelling the complex interaction between a fungicide, a candidate biocontrol agent and the bacterial wheat microbiome

15:15-15:30 – **Wafa ACHOUAK (CNRS-CEA-Aix Marseille University, FR):** Phytopathogens-induced plant response, assemblage and network of the wheat rhizosphere microbiota



15:30-15:45 – **Tetiana KALACHOVA (Institute of Experimental Botany, CZ):** A look behind the curtains: exploring the dynamics of tripartite interactions between plants, bacteria and bacteriophages

15:45-16:00 – **Joana VICENTE (FERA, UK):** Detection of mushroom pathogens in complex microbial communities

16:00-16:15 – General Discussion

16:15-16:45 – *Break*

## **Session 3 From current microbial inoculants to synthetic communities**

Chairs: Anna BONATERRA & Clair PRIGENT-COMBARET

### **Invited Lecture**

16:45-17:15 – **Emilio MONTESINOS (Laboratory of Plant Pathology-CIDSAV, ES):** Functional peptides in microorganisms and its potential in plant disease control

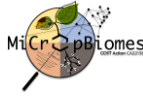
### **Oral Presentations**

17:15-17:30 – **Núria DARANAS (University of Girona, ES):** Fate of *Bacillus velezensis* and *Lactiplantibacillus plantarum* strains applied to apricot, peach, and grapevine crops

17:30-17:45 – **Iakovos PANTELIDES (Cyprus University of Technology, CY):** From suppressive compost to targeted inoculants: synthetic microbial communities promote tomato growth and disease control

17:45-18:15 – General Discussion

19:00 – **Congress Dinner**



## Thursday 12th of September

### **Session 4 Crop-microbiome assembly dynamics under specific environments**

Chairs: Ellodie VANDELLE & Gordana RACIC

#### **Invited Lecture**

08:45-09:15 – **Dejana PANKOVIC (Julius Kühn Institut Quedlinburg, DE):** Bacterial priming responses of resistance and growth parameters in spring barley

#### **Oral Presentations**

09:15-09:30 – **Catarina LEAL (Instituto de Ciencias de la Vid y del Vino - Logroño, ES):** Drought influences the fungal community structure, diversity, and functionality inhabiting the grapevine xylem and enhances the abundance of *Phaeomoniella chlamydospore*

09:30-09:45 – **Lyuben ZAGORCHEV (Sofia University, BG):** Interaction between soil microbiota, host plants, and stem parasitic plants of the genus *Cuscuta* under salinity

09:45-10:00 – **Marko PETEK (National Institute of Biology, SI):** Microbiome profiling of potato roots and leaves grown under organic vs integrated pest

10:00-10:15 – **Francesco SPINELLI (University of Bologna, IT):** The influence of fruit microbiota on ripening and quality and its dynamic during post-harvest

10:15-10:30 – General Discussion

10:30-11:00 – Break



## **Session 5 Communication, and engagement with society**

Chairs: Caroline DE TENDER & Ralph KOEBNIK

### **Invited Lectures**

11:00-11:30 – **Sónia GARCIA MENDEZ (Ghent University, BE):** Fast track to environmentally adapted bacteria for soybean growth at northern latitudes

11:30-12:00 – **Céline DE PESSEMIER (Apha.bio, BE):** Unravelling mode-of-action of biocontrol agents to combat fungal diseases in wheat

12:00-12:30 – **Shared experiences for STSM/funded trainees**

12:30-14:00 – *Lunch*

14:00-16:30 – **Working Group Meetings - Parallel Sessions**

16:30-17:00 – **Plenary Conclusion WG1-WG5**

17:00-18:30 – **Poster Session, Porto Wine Taste & Group Picture**

## **Friday 13th of September**

09:00-11:00 – **Management Committee Meeting**

11:00-13:00 – **Social Programme - Natural History and Science Museum**