



European Plant Science Organisation
www.epsoweb.org

Workshop Handout

EPSO Workshop Implementing a Plants and Microbiomes Strategy in Europe

Brussels, 08.12.2020

The EPSO Working Group on Plants and Microbiomes has the pleasure to announce its third workshop to take place online on 13-14 January 2021, 09:00 – 12:00 and 09:00 – 13:15 respectively.

This third workshop has two aims. First, we will hear first highlights from (multi-)national plants and microbiomes research and innovation initiatives – to this end we will invite later on Expression of Interest from our Working Group members to present. Second, we will discuss in more detail two themes which need further elaboration by the Working Group: 'Advancing from correlation to causation from lab to field to ecosystems' and on 'Research infrastructure' - and provide advice to Horizon Europe and (multi-)national research strategies.

The meeting intends to increase collaborations between the working group members (via e.g. COST action, Coordination & Support Actions, initiate more collaborations both bi- and multi-lateral).

At the end of the meeting, a workshop report will be drafted on the current status, goals and next steps in plants and microbiomes research – particularly – and will be provided as science advice to policy to the European Commission.

We kindly ask you to register for your participation by e-mail to angela.sessitsch@ait.ac.at before 18 December 2020.

We hope welcoming you in January!

Angela Sessitsch, Paul Schulze-Lefert, Corné Pieterse and Karin Metzlauff

Workshop Programme - outline and themes

Day 1 – 09:00 – 12:00

- **Welcome**
- **T1: First highlights from (multi)national plants and microbiomes initiatives (09:15 – 10:45)** moderated by Paul Schulze-Lefert
 - Welcome
 - Main R&I initiatives in DE, DK, NL – highlights and update (20 min each: 15' + 5')
 - Paul Schulze-Lefert, Mette Haubjerg Nicolaisen, Harro Bouwmeester
 - Member States and EU initiatives: Soil health and food mission (10' scope + 10' discussion)
 - Alfred Grand / AT

- **Coffee Break 10:45 – 11:15**

- **T1: First highlights from (multi)national plants and microbiomes initiatives cont. (11:15 – 12:00)** moderated by Karin Metzloff
 - Member States & EU initiatives cont.: Biodiversity partnership, Agroecology partnership (20 min each: 10' scope + 10' discussion)
 - Hilde Eggermont (Belgian Biodiversity Platform), Chantal Gascuel (INRAe)

Day 2 – 09:00 – 13:15

- **Introduction to T2 and T3 (09:00 - 09:15)** by Angela Sessitsch and Paul Schulze-Lefert

- **T2: Addressing R&D bottlenecks (09:15 - 10:00)**

Further discuss recommendations from 2nd Workshop and how best advance these by developing specific and representative cases, which can be used for recommendations:

Group 1 (Chair 1: Angela Sessitsch; Rapporteur 1 t.b.a.):

 - R3-Moving from correlation to causation under lab, greenhouse and field conditions
 - R4-More understanding on the complexity of the ecosystem-plant-microbiome system is needed

Group 2 (Chair 2: Paul Schulze-Lefert; Rapporteur 2: t.b.a.):

 - R5-Plant mechanisms to attract / interact with microbiota require understanding
 - R7-Precompetitive research should address the identification of microbiome-based plant health and resilience indicators and microbiome understanding needed by the industry

- **T2: Addressing R&D bottlenecks cont. (10:00 - 10:45)**

Further discuss recommendations from 2nd Workshop and how best advance these by developing specific and representative cases, which can be used for recommendations:

Group 2 (Chair 2: Paul Schulze-Lefert; Rapporteur 2: t.b.a.):

 - R3-Moving from correlation to causation under lab, greenhouse and field conditions
 - R4-More understanding on the complexity of the ecosystem-plant-microbiome system is needed

Group 1 (Chair 1: Angela Sessitsch; Rapporteur 1 t.b.a.):

- R5-Plant mechanisms to attract / interact with microbiota require understanding
 - R7-Precompetitive research should address the identification of microbiome-based plant health and resilience indicators and microbiome understanding needed by the industry
- **Coffee break (10:45 – 11:15)**
 - **T2: Addressing R&D bottlenecks & next steps cont. (11:15 – 11:45)**
Reports (by the rapporteurs) to the plenary and agree next steps (Angela Sessitsch, Paul Schulze-Lefert and Karin Metzloff)
 - **T3: Addressing infrastructure bottlenecks & next steps (11:45 – 13:00)**
Moderated by Corné P
Further discuss recommendations from 2nd Workshop and how to best advance these:
 - R17-European infrastructure recommended for plant microbiome research
 - R15-Open access databases integrating (plant) microbiome and meta-data are required
 - All plenary, no breakout sessions
 - **AOB (13:00 – 13:15)** (discuss progress / ideas regarding the other recommendations as appropriate) and **closure** by Angela Sessitsch, Paul Schulze-Lefert and Karin Metzloff

List of participants

Islam Abd El-Daim, AIT, AT
Harro Bouwmeester, Uni Amsterdam, NL
Lemong Dong, Uni Amsterdam, NL
Hilde Eggermont, Bioversity, BE
Kellye Eversole, Eversole Ass., USA
Chantal Gascuel, INRAE, FR
Alfred Grand, Grand Farm, AT
Alessandra Guerrieri, Uni Amsterdam, NL
Mette Haubjerg Nicolaisen, Uni Copenhagen, DK
Pablo Ibort, Koppert, NL
Mailin Klein, FU Amsterdam, NL
Robert Koller, FZ Julich, DE
Judith Lundberg-Felten, SLU, SE
Karin Metzloff, EPSO
Harald Mikkelsen, Koppert, NL
Anna Maria Pirttilä, Uni Oulu, FI
Corné Pieterse, Utrecht Univ, NL
Soledad Sacristan, UPM-INIA, Madrid, ES
Michael Schloter, Helmholtz Munich, DE
Paul Schulze-Lefert, MPIZ, DE
Angela Sessitsch, AIT, AT
Sofie Thijs, Uni. Hasselt, BE
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Corinna Vacher, INRAE, FR
Jaco Vangronsfeld, Uni Hasselt, BE

Anouk Zancarini, Uni Amsterdam, NL

Contacts

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Useful links

EPSO Plant and Microbiomes Working Group including report from 1st and 2nd workshop

<https://epsoweb.org/working-groups/plants-and-microbiomes/>

EPSO news: <https://epsoweb.org/news/>

EPSO members: <https://epsoweb.org/about-epsso/epsso-members/>

EPSO representatives: <https://epsoweb.org/about-epsso/representatives/>

About EPSO

EPSO, the European Plant Science Organisation, is an independent academic organisation that represents more than 200 research institutes, departments and universities from 32 countries, mainly from Europe, and 2.700 individuals Personal Members, representing over 26 000 people working in plant science. EPSO's mission is to improve the impact and visibility of plant science in Europe, to provide authoritative source of independent information on plant science including science advice to policy, and to promote training of plant scientists to meet the 21st century challenges in breeding, agriculture, horticulture, forestry, plant ecology and sectors related to plant science. <https://epsoweb.org> | EU Transparency Register Number 38511867304-09

Administrative information:

Information on joining the meeting has been sent to registered participants.