



Programme

5th Plant Microbiome Symposium

17-21 June 2024 – KIT Amsterdam



Monday June 17th, 17:00-19:00: Welcome reception & registration

Royal Tropical Institute (KIT), Mauritskade 63 Amsterdam

Tuesday, June 18

Time	Activity	Speaker	Location
08:00 - 09:00	Registration		Marble Hall
09:00 - 09:15	Opening	Harro Bouwmeester	Queen Máxima Hall

Session 1: Plant-microbiome interactions for sustainable agriculture

Chaired by: Pieter van 't Hof & Rodrigo Mendes

09:15 - 09:45	Microbiome engineering for a sustainable agriculture	Marcel van der Heijden	Queen Máxima Hall
09:45 - 10:15	Invited talk: Natural and Agricultural Laboratories: Microbiome Applications and Fundamental Knowledge	Antonio León Reyes	
10:15 - 10:35	Towards defining the recruitment and ecological function of Bacteroidota in the plant microbiome	Ian Lidbury	
10:35 - 11:05	~ BREAK ~		Marble Hall
11:05 - 11:35	Invited talk: Plant Responsiveness to Microbiota Feedbacks	Klaus Schläppi	Queen Máxima Hall
11:35 - 11:55	Synthetic microbial communities for disease suppression in hydroponic systems	Stephen A. Rolfe	
11:55 - 12:15	A walk on the wild side: exploring the functional potential of Andean soil microbiomes to enhance tolerance of potato to late blight disease	Dario X. Ramirez-Villacis	
12:15 - 13:30	~ LUNCH ~		Marble Hall

Session 2: Plant-microbiome communication and assembly

Chaired by: Lemeng Dong & Tim Mauchline

13:30 - 14:00	Invited talk: Rhizosphere immunity and its precision enhancement	Zhong Wei	Queen Máxima Hall
14:00 - 14:20	Seed aging affects seedling development and the microbiome of Brassica napus -	Nina Bziuk	
14:20 - 14:40	Bacterial gene clusters for the catabolism of plant specialized metabolites are crucial for plant-microbe interactions	Akifumi Sugiyama	
14:40 - 15:20	~ BREAK ~		Marble Hall
15:20 - 15:50	Invited talk: Towards an understanding of root microbiome assembly in model plants and crops: findings from studies using complex bacterial communities	Simona Radutoiu	Queen Máxima Hall
15:50 - 16:10	Identification of specialized root exudates associated with microbiome assembly of wild and domesticated tomato	Jié Hu	
16:10 - 18:30	Poster Session		Maurits Room

Wednesday, June 19

Session 3: Technological advances and translation

Chaired by: Jos Raaijmakers & Roeland Berendsen

Time	Activity	Speaker	Location
09:00 - 09:30	Invited Talk: Deciphering the chemical language of plant-microbiome interactions	Marnix Medema	Queen Máxima Hall
09:30 - 10:00	Invited Talk: Intra-bacteria competition determines plant-beneficial potential of SynComs	Kathrin Wippel	
10:00 - 10:20	baCLIFE: a user-friendly computational workflow for genome analysis and prediction of lifestyle-associated genes in bacteria	Guillermo Guerrero-Egido	
10:20 - 10:40	Gamification of microbiome research dissemination: a video game and the "Microbiome & Health" MOOC	Matthias Schweitzer	
10:40 - 11:10	~ BREAK ~		Marble Hall
11:10 - 11:40	Invited talk: Microdialysis as a tool to study plant microbial interactions	Sandra Jämtgård	Queen Máxima Hall
11:40 - 12:00	Seed tuber microbiome is a predictor of next-season potato vigor	Yang Song	
12:00 - 13:00	~ LUNCH ~		Marble Hall
13:00 - 14:30	Early career market with invited speakers and industry		Downing Street
14:30 - 18:30	Excursion: Amsterdam boat tour by Amsterdam Boat Experience		Docks in front of Pillows Hotel
18:30 - 21:00	Conference Dinner at restaurant Pllek		Pllek (Tt. Neveritaweg 59)

Thursday, June 20

Session 4: Transfer to and importance of the plant microbiome for other organisms

Chaired by: Karen Kloth & Vasilis Kokkoris

Time	Activity	Speaker	Location
09:00 - 09:30	Invited Talk: The edible microbiome: tracking the food-gut axis	Gabrielle Berg	Queen Máxima Hall
09:30 - 10:00	Invited Talk: Plant to gut microbiome crosstalks: implications for human health	Hilde Herrema	
10:00 - 10:20	Plant peptides as new eco-chemicals: an innovative approach to boost a healthy microbiome	Valeria Castaldi	
10:20 - 10:40	Designing efficient synthetic microbial communities for enhanced survival and efficacy in mitigating biotic stress in agriculture	Rashi Tyagi	
10:40 - 11:10	~ BREAK ~		Marble Hall
11:10 - 11:40	Invited talk: Expansion of herbivory, constriction to a host plant: a symbiont's work	Ana Simao Pinto de Carvalho	Queen Máxima Hall
11:40 - 12:00	Crop diversification through intercropping shapes within-field soil bacterial community variation	Joliese Teunissen	
12:00 - 12:20	Plant-driven assembly of a soilborne phyllosphere disease-suppressive microbiome	Jelle Spooren	
12:20 - 13:30	~ LUNCH ~		Marble Hall

Session 5: Plant Microbial Community Ecology

Chaired by: Marcel Dicke & James Weedon

13:30 - 14:00	Invited talk: The genomic architecture of adaptation in nitrogen fixing symbionts	Joel Sachs	Queen Máxima Hall
14:00 - 14:20	The root microbiome as a hotspot for horizontal gene transfer from bacteria to fungi	Arpan Kumar Basak	
14:20 - 14:40	Beyond defense: Glucosinolate structural diversity shapes recruitment of a metabolic network of leaf-associated bacteria	Kerstin Unger	
14:40 - 15:20	~ BREAK ~		Marble Hall
15:20 - 15:50	Invited talk: Deciphering plant-rhizosphere interactions within a community framework	Sharon E. Zytynska	Queen Máxima Hall
15:50-16:10	Genome-scale metabolic networks predict rhizosphere microbiome suppressiveness against soil-borne pathogen <i>Ralstonia solanacearum</i>	Tianjie Yang	
16:10-16:30	Lessons from the wild: deciphering phyllosphere microbiome assembly and functions of wild green foxtail for designing synthetic communities	Xiaoyu Zai	
16:30-18:30	Poster session		Maurits Room
18:30-21:00	Royal Tropical Dinner		KIT

Friday, June 21

Session 6: Microbiome-mediated effects on plant physiology and stress tolerance

Chaired by: Romyana Karlova & Paolina Garbeva

Time	Activity	Speaker	Location
9:00 - 09:30	Invited talk: Harnessing the power of deserts to make plants resistant to salt, heat and drought stress	Heribert Hirt	Queen Máxima Hall
09:30 - 10:00	Invited talk: Microbial legacies drive plant health	Roeland L. Berendsen	
10:00-10:20	Exploring Microbial Interaction for Plant Drought Resilience in <i>Phaseolus vulgaris L.</i>	Thierry A. Pellegrinetti	
10:20-10:40	<i>Pseudomonas</i> volatiles increase drought resilience through important transcriptional changes and by modifying the rhizosphere microbiome composition	Zulema Carracedo Lorenzo	
10:40 - 11:10	~ BREAK ~		Marble Hall
11:10 - 11:40	Invited talk: When in drought: causes and consequences of <i>Streptomyces</i> enrichment in plant roots during drought	Connor Fitzpatrick	Queen Máxima Hall
11:40 - 12:00	Aboveground JA- and SA-pathways induce stress-specific root microbiome responses in <i>Brassica oleracea</i>	Marcela Aragón	
12:00 - 12:20	Identifying disease-suppressive microbial consortia by dilution-to-extinction	Jiayi Jing	
12:20-12:40	Closing remarks and new venue	Jos Raaijmakers - Harro Bouwmeester	

