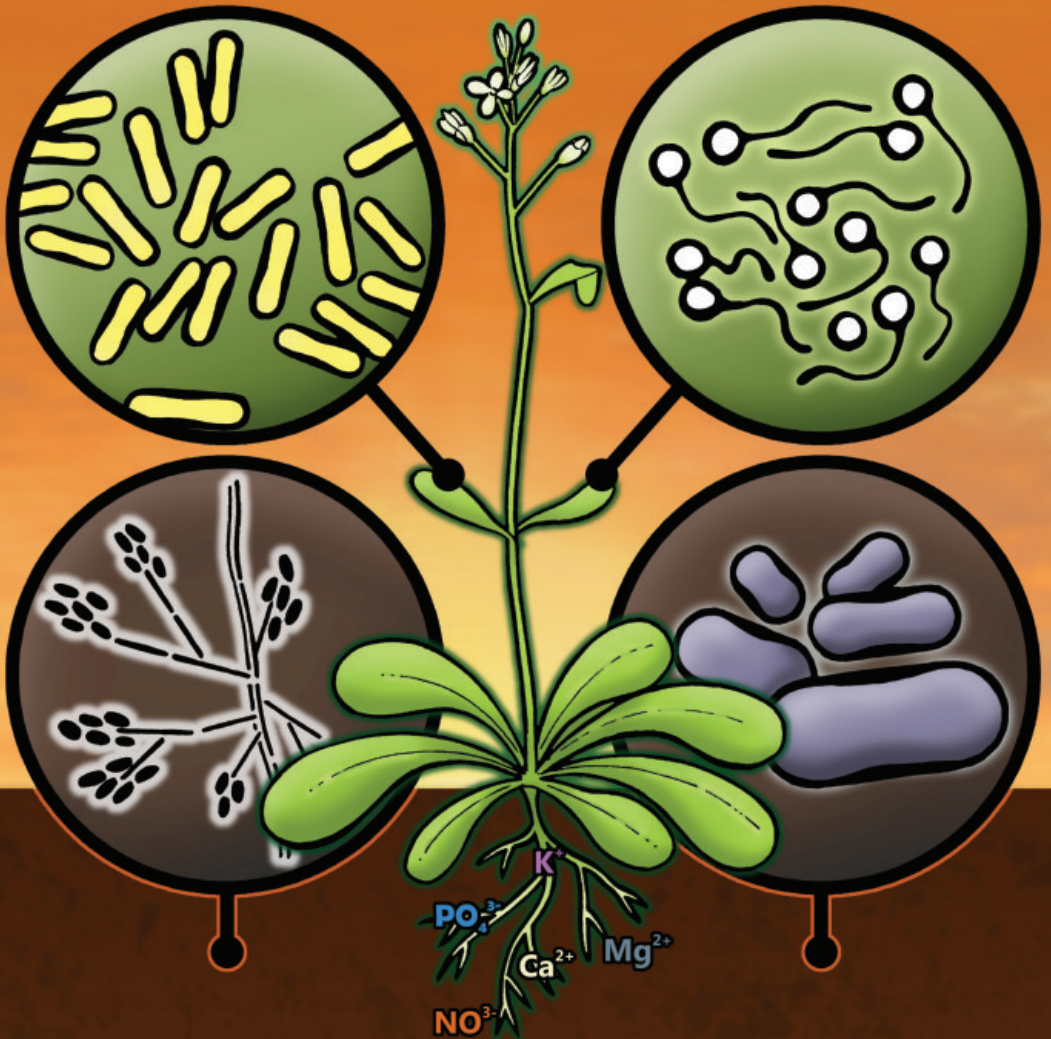


28th New Phytologist Symposium

Functions and ecology of the plant microbiome

Aldemar Hotel, Rhodes, Greece

18–21 May 2012



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Scope

Our overall goal for the Symposium is to explore the potential of combining next generation sequencing techniques, metagenomic approaches and quantitative plant genetics to infer first principles underlying the organization of plant–microbe communities. We hope that the outcome of this Symposium will contribute to the establishment of best practices for studies on the microbiota of plants in both laboratory conditions and in natural settings.

In order for the Symposium to succeed, we are bringing together researchers working in genetics/genomics, soil science, microbiology, computational biology, and plant and microbial physiology. We hope that this rather disparate group of experts can help us to better understand the origins, functions and ecology of microbial communities in the phyllo- and rhizosphere, helping to bridge the gap between soil and plant sciences. By applying this knowledge, we hope to elucidate how humans influence plant microbiota through domestication and agricultural practices.

There are several large questions that present exciting opportunities for the next generation of plant–microbe interaction studies. These include: How do plants feed and structure microbial rhizosphere communities to their advantage? Is the taxonomic diversity of microbiota related to functional diversity? Does this extend to entire energy webs in ecosystems? And, can the notoriously low heritability of plant growth be accounted for by large environmental interactions with microbial assemblages in the rhizosphere which are, in turn, influenced by soil types? Answering these questions will require multidisciplinary approaches that will be reflected in presentations at this Symposium.



Symposium format

The symposium will be held at the Aldemar Hotel, Rhodes, Greece, and will take place over three days. Twenty invited speakers will form the basis of discussion at what will be a relatively small meeting (up to 140 participants). Following each talk there will be 10 minutes for questions and discussion. In this way we hope to provide a lively forum for exchanging ideas and fostering new approaches. There will be a poster session on the Saturday evening and a conference dinner on Sunday night.

Keynote speaker

Jo Handelsman Yale University, NY, USA

Confirmed speakers

Wafa Achouak CEA Cadarache, France

Peter Bakker Utrecht University, The Netherlands

Jeffrey Bennetzen University of Georgia, USA

Joy Bergelson University of Chicago, USA

Ralf Conrad Max Planck Institute, Marburg, Germany

Jeff Dangl University of North Carolina, Chapel Hill, USA

Noah Fierer University of Colorado at Boulder, USA

Anton Hartmann Helmholtz Zentrum, Munich, Germany

Philippe Hinsinger INRA, Montpellier, France

Phil Hugenholz University of Queensland, Australia

Robert Jackson Duke University, USA

Angela Kent University of Illinois, Urbana-Champaign, USA

Stephen Lindow University of California, Berkeley, USA

Jos Raaijmakers Wageningen University, The Netherlands

Paul Schulze-Lefert Max Planck Institute, Cologne, Germany

Venkatesan Sundaresan University of California, Davis, USA

Daniel van der Lelie RTI International, NC, USA

Julia Vorholt Swiss Federal Institute of Technology, Switzerland

Jerry Tuskan Oak Ridge National Laboratory, USA

Pablo Zamora University of California, Davis, USA

Organisation

Jeff Dangl (University of North Carolina, Chapel Hill, USA), Paul Schulze-Lefert (Max Planck Institute for Plant Breeding Research, Cologne, Germany)

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New Phytologist Trust

The New Phytologist Trust is a non-profit-making organisation dedicated to the promotion of plant science.

Complete details and registration at

www.newphytologist.org