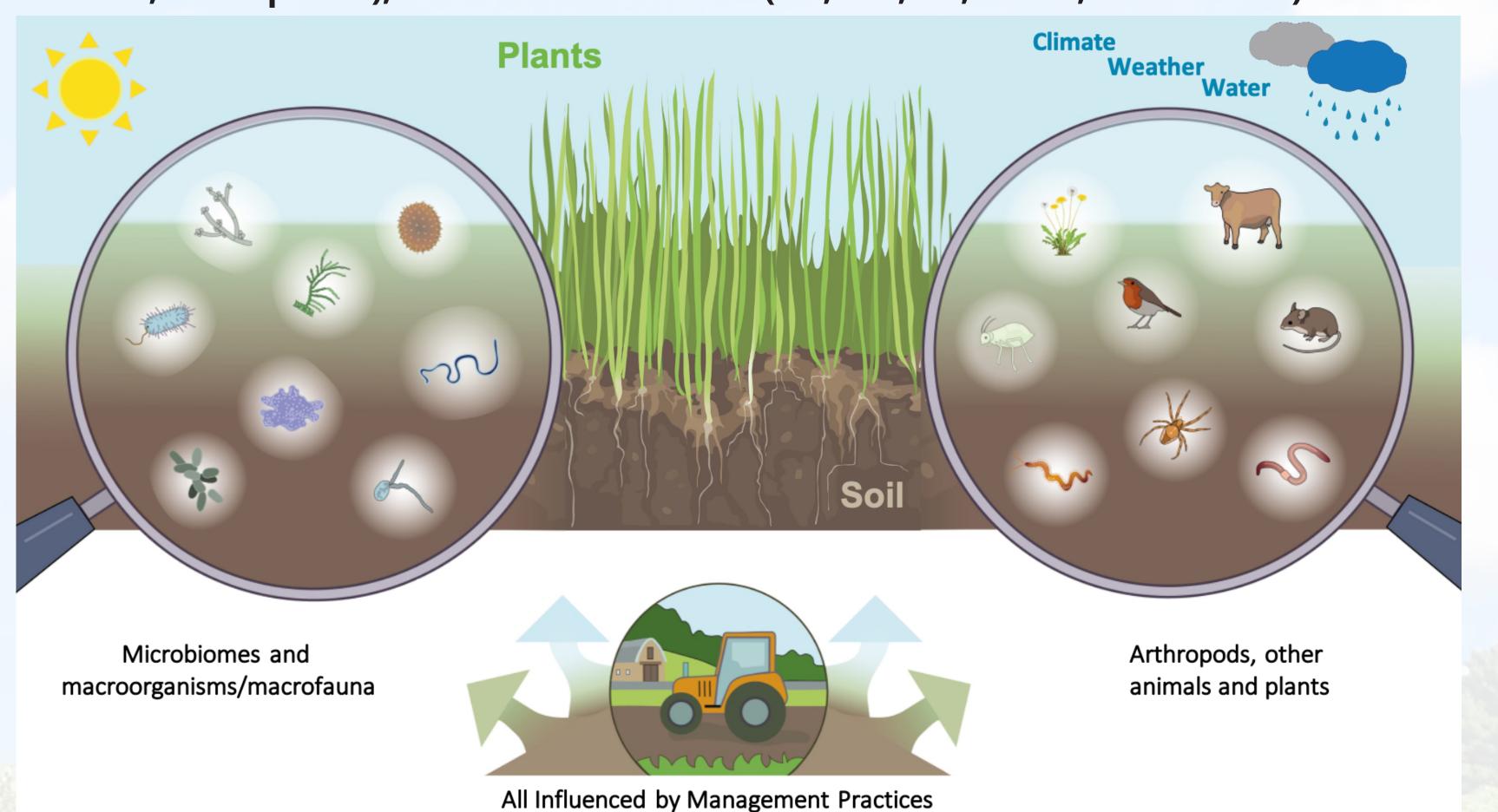
INTERNATIONAL ALLIANCE FOR PHYTOBIOMES RESEARCH

THE PHYTOBIOMES ALLIANCE

The mission of the International Alliance for Phytobiomes Research is to establish a science and technology foundation for site-specific, phytobiome-based enhancement of sustainable food, feed, and fiber production.

PHYTOBIOMES: COMPLEX SYSTEMS OF PLANT-BASED AGRICULTURE

Phytobiomes consist of all organisms living in, on, or around plants (e.g., microbes, animals, other plants), and the environment (i.e., soil, air, water, and climate).



FUNDED COORDINATED PROJECTS

- Microbes4Climate Microbial services addressing climate change risks for biodiversity and for agricultural and forestry ecosystems: enabling curiosity-driven research and advancing frontier knowledge

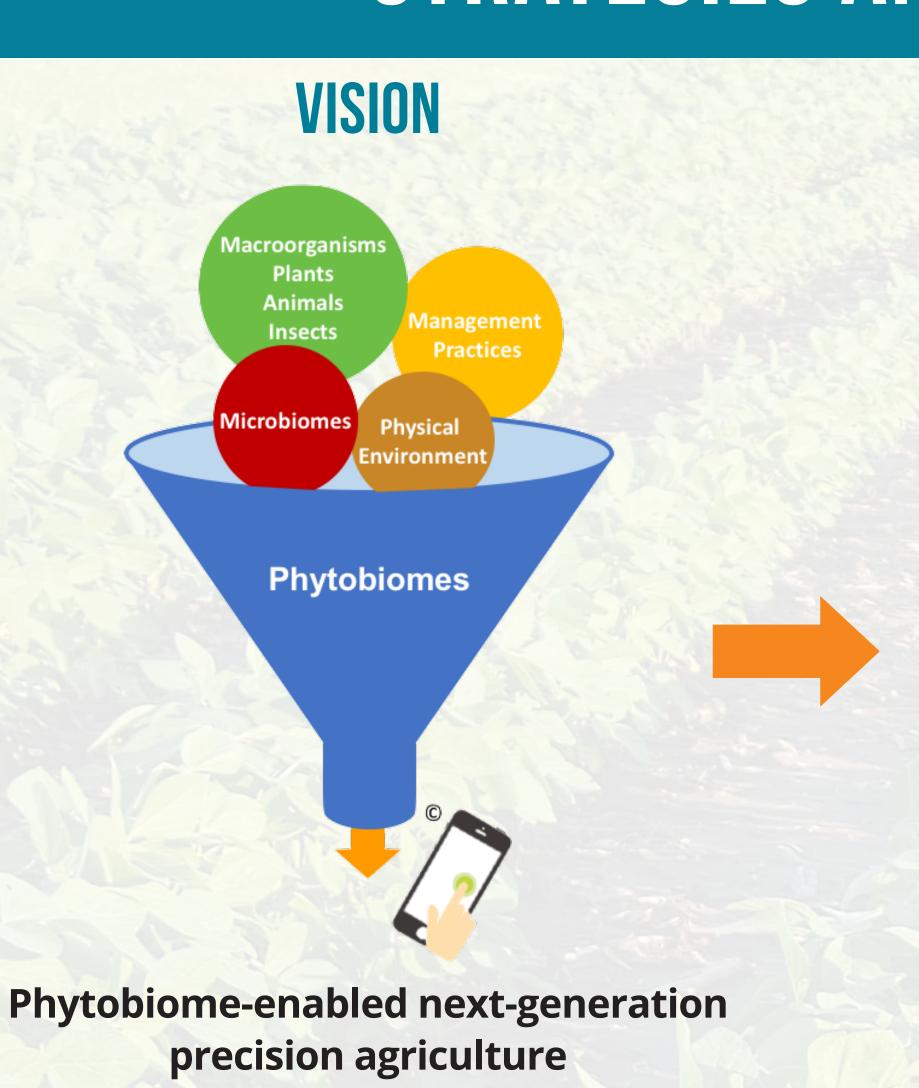
 Funded by Horizon Europe Framework Programme (HORIZON) Coordinator: MIRRI, PT
- MICROBE MICRObiome Biobanking Enabler
 Funded by Horizon Europe Framework Programme (HORIZON) Coordinator: Tanja Kostic, AIT Austrian Institute of Technology, AT
- Novel microbiome technologies to increase profitability for Australian horticulture Funded by Hort Innovation, Australia Coordinator: Kirsty Bayliss, Murdoch University, AU

USCCN – United States Culture Collection Network
Funded by the National Science Foundation (NSF), USA – Coordinator: Dusti Gallagher, Phytobiomes Alliance

- Root2Res Root phenotyping and genetic improvement for rotational crops resilient to environmental change

 Funded by Horizon Europe Framework Programme (HORIZON) Coordinator: ARVALIS, FR and The James Hutton Institute, UK
- The UK Crop Microbiome Cryobank
 Funded by the Biotechnology and Biotechnology Sciences Research Council (BBSRC) UK Research Innovation Coordinator: Matthew Ryan, CABI, UK
 - SUCSEED Stop the use of pesticides on seeds
 Funded by the Agence National de la Recherche (ANR), France Coordinator: Matthieu Barret, INRAE, FR
 - Improved Identification and Detection of Select Agent Ralstonia solanacearum Strains Threatening the US Potato Industry
 Funded by the USDA Animal Plant Health Inspection Service (APHIS), USA Coordinator: Kellye Eversole, Phytobiomes Alliance

STRATEGIES AND PRIORITIES OF THE PHYTOBIOMES ALLIANCE



STRATEGIES

- Identify research, resource and technology gaps and develop roadmaps to fill them
- **Solution** Coordinate and manage projects to address gaps
- Facilitate international and public-private collaborations
- >>> Focus on pre-competitive science
- Develop an interdisciplinary community of researchers committed to advancing phytobiomes science
- **Empower industry growth and profitability**

CURRENT EFFORTS

Linking Components Across Phytobiomes Systems

Increased engagement in Europe: Microbes 4 Climate and MICRObiome Biobanking Enabler

Phytopathology article: From Microbes to Microbiomes: Applications for Plant Health and Sustainable Agriculture

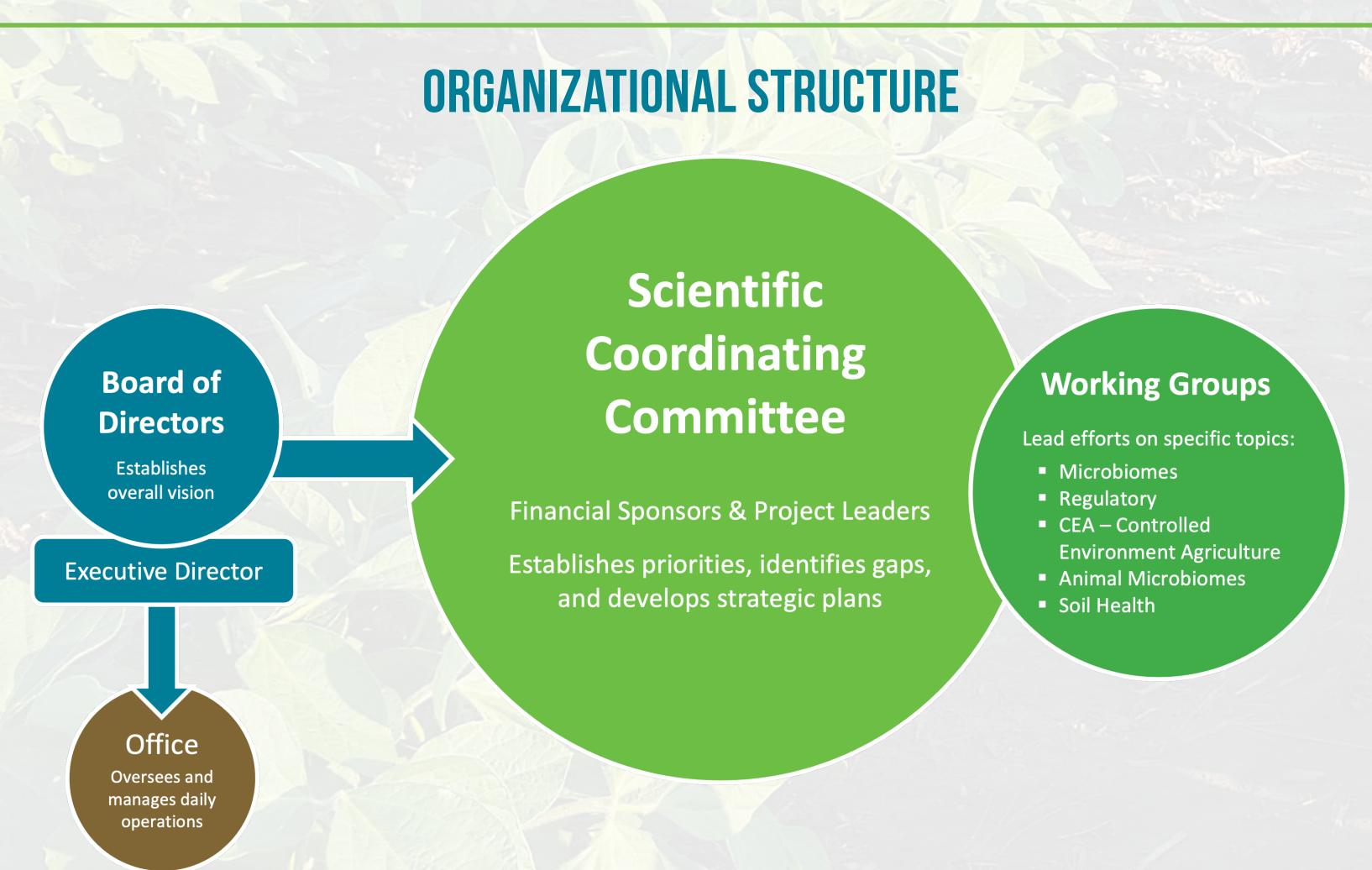
Phytopathology article: Genotypic & Phenotypic Analyses Show Ralstonia solanacearum Cool Virulence is a Quantitative Trait Not Restricted to "Race 3 Biovar 2"

Secured US NSF grant to Coordinate Microbial Collections and Networks: Public & Private

Novel Microbiome Technologies to Increase Profitability for Australian Horticulture

Establish Linkages and Commonalities between Plant and Animal Health & Nutrition

Draft regulatory science roadmap for microbials



PHYTOBIOMES ALLIANCE SPONSORS

























