PHYTOBIOMES ALLIANCE

Webinar Series Introduction

28 January 2021

Kellye Eversole
Executive Director

PHYTOBIOMES ALLIANCE

INTERNATIONAL ALLIANCE
FOR PHYTOBIOMES RESEARCH

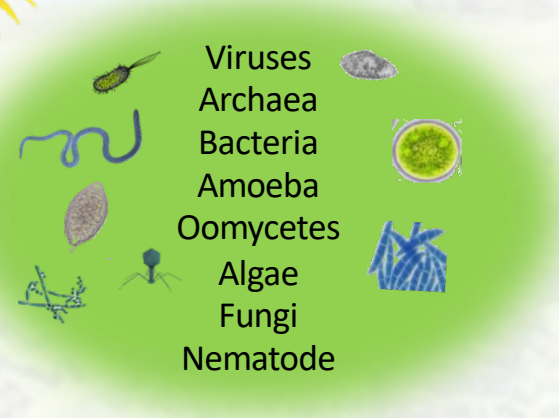
A nonprofit consortium of industry, academic, and governmental scientists

BAYER
Eversole Associates
Enabling Science & Technology
INRAE
novozymes
VALENT BIOSCIENCES
biovante
Colorado State University
eurofins
BioDiagnostics
indigo
Institut de Recherche pour le Développement
FRANCE
JOYN BIO
NewLeaf symbiotics
NOBLE RESEARCH INSTITUTE
Science Serving Agriculture
PennState
College of Agricultural Sciences
PIVOT BIO
THE FERTILIZER INSTITUTE
WCMR
WATERLOO CENTRE FOR MICROBIAL RESEARCH
Aphea.Bio
Applied Nature for Better Agriculture
BioConsortia
AIT
AUSTRIAN INSTITUTE OF TECHNOLOGY
Karyosoft
Augmented Innovations

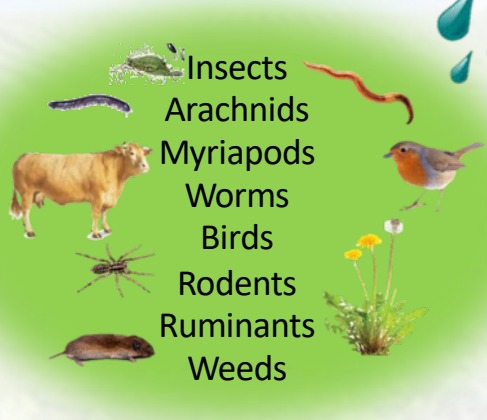
Phytobiomes: Complex Systems of Plant-based Agriculture

Climate, Weather, Water

"Biomes": Site specific environments



Microbiomes and Macroorganisms/Macrofauna



Arthropods, Other Animals and Plants

All influenced by Management Practices

Phytobiomes Alliance Vision

By 2050, all farmers have the ability to use predictive and prescriptive analytics based on geophysical and biological conditions for determining the best combination of crops, management practices, and inputs for a specific field in a given year.

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Phytobiomes Conference 2021

14-17 September 2021

Denver, CO, USA

www.phytobiomesconference.org

Main Scientific topics

- Climate/weather
- Environmental Data Set
- Plant fitness
- Microbial community assembly and function
- Network analyses within the phytobiome system
- Modeling
- Data – framework, tools and resources, big data
- Genetic linkages
- Carbon sequestration
- Interactions within phytobiomes for abiotic stress
- Engineering microbes and microbial communities
- Precision agriculture/digital Ag
- Fertilizer, nutrient, and chemical input efficiency
- Product development
- Regulatory requirements
- Greenhouse & Field trials
- Industry research needs

Phytobiomes Alliance Next Webinar: 11 March 2021

- **Genetic dissection of disease resistance mechanisms hijacked by a necrotrophic pathogen of wheat**
- Presenter: Justin Faris, Research Geneticist, USDA-ARS
- Registration: https://attendee.gotowebinar.com/register/4854594937451548173
- Time: 8am PST, 11am EST, 5pm CET

Our webinar series: https://phytobiomesalliance.org/webinars/

Register to the mailing list to receive news about events organized by the Phytobiomes Alliance http://tiny.cc/ffw8rz

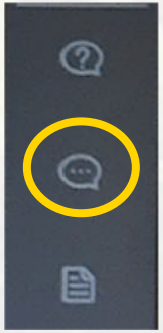
Phytobiomes Alliance Webinar dashboard

- The webinar is recorded and will be posted on the Phytobiomes Alliance YouTube channel in a couple of weeks. Subscribe to the channel to never miss a new upload https://www.youtube.com/c/PhytobiomesAlliance
- The presentation section will be followed by a Q&A

Questions

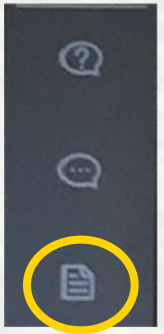
Submit your questions in the Q&A panel, do not use the chat

Chat



Use the chat panel to talk with fellow attendees or the organizers

Handouts



Download handouts from the presentations in the handout panel

- **Predictive biology: understanding and reversing the evolution of antibiotic resistance**

- Presenter:

Allison J. Lopatkin, Assistant Professor
Computational Biology, Barnard College
Columbia University, USA

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Thank you for your participation

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