## 2<sup>nd</sup> Ag Innovations Conference: **Microbial Control**

Sunday 13 August, 2017 at The Great Hall, University of California San Diego, La Jolla, CA

This one-day conference is organized in conjunction with the 50<sup>th</sup> Annual Meetings of the Society for Invertebrate Pathology (SIP) at UC San Diego, La Jolla. The objective of the 2<sup>nd</sup> Ag Innovations Conference: Microbial Control is to bring applied microbial control research concepts from around the world to growers, PCAs, and agriculture and ornamental industry partners in Southern California. This extension-focused event will also allow growers to learn more about the potential of microbial control and new products or techniques that can help address local issues. This event will also give researchers an opportunity to understand growers' needs and develop their future projects based on these needs.

Since seating is limited at this venue, early registration is highly encouraged. Please register at http://ucanr.edu/AIC2017. Registration fee: \$25.00 until June 15 and \$50 from June 16 to August 6. Lunch and refreshments will be provided. Six DPR and CCA CEUs have been approved.

A mini agricultural exposition will also be organized at this event where different industry partners will showcase their biopesticides products and microbial control technologies. Contact Surendra Dara at skdara@ucdavis.edu or 805-720-1700 for additional information.

7:30 AM

Sign-in

8:00 AM

Welcome remarks

Surendra K. Dara



California Department of Pesticide Regulations: Its mission and challenges with an emphasis on microbial control

CDPR mission and challenges in maintaining environmental safety and agricultural sustainability.

#### **Brian Leahy**

Director, California Department of Pesticide Regulations, Sacramento, CA



8:30 AM

8:50 AM

Biologicals for IPM programs

Market status, overview of available products, best uses, and case studies.



**Pam Marrone** 

CEO/Founder, Marrone Bio Innovations, Inc., Davis, CA



#### Leap™: A new dual-action biorational pesticide for plant disease management and insect control

With Btk and methyl salicylate active ingredients Leap<sup>TM</sup> has dual mode of action against pests and diseases and serves as an important tool in IPM programs.

#### Russ Eldridge et al.



Product Development Manager, Valent BioSciences, Libertyville, IL Advantages and disadvantages of microbial control of pests in ornamental plant

production Ornamental plants are high valued specialty crops that can afford little pest damage to remain marketable. Current use of microbial control options and their merits and demerits.

#### James Bethke

CE Advisor and County Director, UC Cooperative Extension, San Diego, CA



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9:30 AM

#### Microbial control of endemic and invasive pest management

Entomopathgens as potential control options for managing endemic and invasive pests on multiple crops in California.



#### Surendra K. Dara

Strawberry and Vegetable Crops Advisor, UC Cooperative Extension, San Luis Obispo, CA



#### Entomopathogenic fungi as plant growth promoters and disease antagonizers

Entomopathogenic fungi play a bigger role than the pathogens of arthropod pests. They improve water absorption and plant growth, and antagonize plant pathogens.



Sumanth S. R. Dara and Suchitra S. Dara

Bakersfield, CA

**Coffee Break-Expo Visit** 

10:10 AM



#### Microbial control of weevil pests in turfgrass

Strategies for controlling weevils and billbugs with entomopathogenic fungi, nematodes, and bacteria-based products.



#### Albrecht Koppenhöfer

Professor/Extension Specialist, Rutgers University, New Brunswick, NJ



#### Microbial control approaches for pests of fruit and nut trees

Cases studies and approaches in managing aphids, borers, and weevils using entomopathogenic bactia, fungi, and nematodes.



#### **David Shapiro-Ilan**

Research Entomologist, USDA-ARS, Byron, GA



11:30AM

#### The feasibility and benefits of mixed microbial pesticides

Combined applications of Bacillus thuringiensis and Beauveria bassiana for managing cabbage looper. Strategies for managing similar pests will also be discussed.



#### Robert Behle

Research Entomologist, USDA-ARS, Peoria, IL



## Update on new and improved microbials and other biopesticides from Certis

Several new active ingredients and improved formulations introduced in 2016 and 2017 for conventional and organic crop protection programs in multiple crops in California.

#### Michael B. Dimock

Vice President, Field Development and Technical Services, Certis USA, Maryland, MD

**Lunch Break-Expo Visit** 

12:10 PM





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1:30 PM

2:10 PM

2:30 PM



#### NPVs for lepidopteran control in vegetable production

Opportunities and challenges of including baculoviruses in insect control strategies. USA and worldwide experiences.

#### Silvana Niedermann

Area and Product Manager, Andermatt Biocontrol AG, Grossdietwill, Switzerland



#### Expanding horizons for the versatile Beauveria bassiana strain GHA

Increased potential of BotaniGard and Mycotrol through the development of new formulations and the identification of new targets, sites, and uses.

#### **Daniel Peck**

Product Development Manager, BioWorks, Inc., Victor, NY



#### New microbial pesticides for managing insect pests and plant pathogens

New products based on an entomopathogenic nematode and a biofungicide, their efficacy, and application strategies

#### Katherine Walker

Technical Service Representative, BASF



#### Purpureocillium lilacinum – an important fungal biologic for integrated control of plant parasitic nematodes

Management of root knot and other plant parasitic nematodes in vegetable crops with a beneficial fungus

#### Kris Rasmussen

Research Scientist, Bayer Biologics, West Sacramento, CA

**Coffee Break-Expo Visit** 

02:50 PM



#### BioCeres WP for organic insect control in multiple crops

New formulation based on Beauveria bassiana and its target organisms, compatibility with chemical pesticides, application strategies, and intended cropping systems.

#### **Manuel Campos**



### Technical Agronomist, BioSafe Systems, College Station, TX

Inocucor's IN-M1: A biostimulant that improves crop stress tolerance for increased productivity of high value crops

Inocucor's microbial consortia help plants tolerate stress caused by biotic and abiotic factors. Data from recent strawberry, lettuce, and other crop trials will be presented.

#### Bill Schwoerer

Western Regional Sales Director, Inocucor, San Luis Obispo, CA



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4:10 PM

4:30 PM



Impact of BioFit N on rhizosphere biology, soil fertility and crop productivity

Beneficial microbes promote root development, soil microbial community, and plant health allowing plants to withstand pest and disease pressure and improve yield potential.

**Gary E. Gross** 

US Applied Research Manager, Innovak Global Company, Denver, CO



Multifaceted approaches to incorporating Entomopathogenic fungi in IPM Impact of soil application of Entomopathogenic fungi and other materials on pests and diseases in strawberry and microbial control of broad mite in blackberry.

#### Jimmy Klick

Research Scientist, Driscoll's, Oxnard, CA



Microbial control of arthropod pests and disease: perspective of independent private research

Evaluation of microbial control tools for managing major pests and diseases in multiple crops.

#### **Frank Sances**

National Director of Research, Pacific Ag Research, Salinas, CA

#### 5:10-5:30 PM Q&A and general discussion

<u>Ag Innovations Conference</u> will be held at The Great Hall located at the International House (at the intersection of International Ln and Thurgood Marshall Ln close to Pangea Parking Structure).

#### 7.0 DPR and CCA Continuing Education Units have been approved

Thanks to the following meeting sponsors for their generous support:





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Parking recommended at Pangea. You can purchase a day permit online for \$8 or pay \$2/hour at the Kiosk.

