



The 65th Annual Conference on Soilborne Plant Pathogens and The 50th California Nematology Workshop



March 26-28, 2019

Huntington Library, Art Collections and Botanical Gardens
1151 Oxford Road, San Marino, CA
<http://soilfungus.wsu.edu>

PROGRAM

Tuesday March 26, 2019

- 12:00-4:00 pm **Field trip includes box lunch and botanical garden tour**
- 5:00-5:30 pm **Registration for Conference on Soilborne Plant Pathogens opens**
- 5:30-7:30 pm **Social and dinner– Banta Hall**

Wednesday March 27, 2019

- 8:00-8:30 am **Registration– Ahmanson Classroom**
- 8:30-10:00 am **Opening Session: Soil Health and Microbial Interactions**
- Welcome:** Jim Folsom, Huntington Gardens and Timothy Paulitz, organizer
- Jeffrey Mitchell, UC Davis, Kearney. A vision for soil health for California.
- Daniel Schlatter, USDA-ARS, Pullman, WA. The microbial bases of soil health: inside the black box.
- Howard Ferris, UC Davis. Fifty years nematology workshop: hindsight is 20/20.
- 10:00-10:30 am **Coffee break**
- 10:30-noon **Session I. Soilborne microbial dynamics**
Session Chair: Shashika Hewavitharana, Cal Poly- San Luis Obispo. shewavit@calpoly.edu
(15-minute talks below)
- Soil microbiomes associated with substrate-mediated suppression of plant disease. Dan Chellemi, Agricultural Solutions. dan@rootguard.com
- Attacking apple replant problem with microbiome tools. Shashika Hewavitharana, Cal Poly-San Luis Obispo. shewavit@calpoly.edu

Exploring the relationships between resistance to soil-borne diseases and the rhizosphere microbiome in Strawberries. Eric Boyd, Cal Poly- San Luis Obispo. Emboyd@calpoly.edu

Rapid detection of strawberry soilborne pathogens using recombinase polymerase amplification (RPA). Seyedmojtaba Mansouripour, Cal Poly- San Luis Obispo. smansour@calpoly.edu

Synergy between *Trichoderma* and anaerobic soil disinfestation (ASD) to manage *Rhizoctonia* root rot in radish. Ram Khadka, Ohio State. khadka.13@buckeyemail.osu.edu

The complex of root pathogens affecting marijuana (*Cannabis sativa* L.) production. Zamir Punja, Simon Fraser University. zamir_punja@sfu.ca

Noon-1:30 pm

Lunch – Banta Hall

1:30-3:00 pm

Session II. New developments in the realm of soilborne pathogens and pests.

Session Chair: Andreas Westphal, UC Riverside- Kearny. andreas.westphal@ucr.edu
(15-minute talks below)

Controlling *Sclerotinia sclerotiorum* in *Glycine max* by targeting oxalic acid production using host-induced gene silencing. Megan McCaghey, UW Madison. mccaghey@wisc.edu

Avoidance, attraction and genes oh my! Using odors to identify neural circuitry and genes underlying nematode behavior. Tiffany Baiocchi, UC Riverside. tiffany.baiocchi@email.ucr.edu

Incidents of nematode return following spot or strip pre-plant treatments. Michael McKenry, Nematologist Emeritus, UC Riverside. mvmckenry83@gmail.com

Evaluation of anaerobic digestates for suppression of plant-parasitic nematodes in soil. Caroline Eberlein, UC Riverside. ceberl@ucr.edu

Is there soil suppressiveness against plant-parasitic nematodes under changing almond production practices? Jinling Huang, UC Riverside. 386584315@qq.com

Developing nematode resistant rootstocks in walnut: trials, tribulations and streamlining. Andreas Westphal, UC Riverside- Kearny. andreas.westphal@ucr.edu

3:00-3:30 pm

Coffee break

3:30-5:00 pm

Session III. Chemical, Biological, and cultural control of soilborne diseases.

Session Chair: Kelly Ivors, Driscoll's Global Plant Health. kelly.ivors@driscolls.com
(15-minute talks below)

Systems-based management of soilborne disease. Dan Chellemi, Agricultural Solutions. dan@rootguard.com

Integrated solution to reduce *Botryosphaeria* incidence and stinkbug feeding damage on pistachio nuts. Raksha Kuenen and G. Musson, Bayer. raksha.kuenen@bayer.com

Nematicides 3.0. Ole Becker, UC Riverside. obecker@ucr.edu

Chemical nematode suppression in perennial cropping systems. Zin Thu Zar Maung, UC Riverside- Kearney. zin.maung@ucr.edu

Seed variety trial for cyst nematode resistant sugarbeet. Becky Westerdahl, UC Davis. bbwesterdahl@ucdavis.edu

Brassica cover crop as potential plant-parasitic nematode suppression in nut crops. Yu-Chen Wang, UC Riverside- Kearny. yuchenw@ucr.edu

5:30-7:30 pm Meeting of the California Nematology Workgroup

Thursday March 28, 2019

7:30-8:00 am **Steering Committee Meeting**

8:30-9:45 am **Session IV. Soilborne disease potpourri.** Session Chair: Hung Doan, UC Davis. Hkdoan@ucdavis.edu (15-minute talks below)

Demystifying Fusarium diseases of tomato. Hung Doan, UC Davis. Hkdoan@ucdavis.edu

Exploring the effect of deficit irrigation on development of Fusarium wilt in tomato. Kelley Paugh, Johanna Del Castillo Múnera, Cassandra Swett, UC Davis. krpaugh@ucdavis.edu

Elucidating the effects of soil salinity on Fusarium wilt of tomato: implications for soil salinity and disease co-management. Beth Hellman, UC Davis. emhellman@ucdavis.edu

Determining pathogenicity of fungal symbionts vectored by *Euwallacea* spp. in southern California landscape trees. Heidi Holmquist, Cal Poly- Pomona. hjholmquist@cpp.edu

Multiple hormonal response-pathways cooperate in host resistance against *Macrophomina phaseolina*. Mercedes Schroeder, UC Riverside. mschr001@ucr.edu

9:45-10:15 am **Coffee break**

10:15-11:00 am **Session V. Soilborne disease potpourri.** Session Chair: Wolfgang Schweigkofler, Dominican University and NORS-DUC. wolfgang.schweigkofler@dominican.edu (15-minute talks below)

Assessing the incidence and diversity of Oomycete species occurring in planned restoration areas of the Angeles National Forest Sebastian Fajardo, UC Davis. snfajardo@ucdavis.edu

Soil remediation for the control of invasive pathogens in nurseries: experiences with *Phytophthora ramorum* et al. Wolfgang Schweigkofler, Dominican University of California. wolfgang.schweigkofler@dominican.edu

Identification of *Pseudomonas* spp. VOCs for use in biocontrol of nematodes and fungi.
Rebecca Kimmelfield and Christopher Taylor, Ohio State University
kimmelfield.1@osu.edu

The Conference on Soilborne Plant Pathogens would like to thank our corporate sponsors for their support. Their contributions went to cover student scholarships, lunches, and food for the social.





Participants of the 65th CSPP/50th California Nematology Workshop