



2024 Book of Abstracts

# 2024 California Plant and Soil Conference Agenda



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February 6-7, 2024

DoubleTree by Hilton Hotel & Fresno Convention Center  
2233 Ventura Street; Fresno, CA 93721; Tel: 559-268-1000

## Tuesday, February 6

General Session: 9:30 A.M. – 12:00 A.M. <i>SALON C</i>	
<b><i>Are We Ready? Adapting Agronomy to an Uncertain Future</i></b> Chairs: Daniel Geisseler, Sarah Light, Lauren Hale CEU: 1.5 CCA (1.0 Crop Mgmt., 0.5 Precision Ag.)	
9:30 – 9:45	<b>Daniel Geisseler, UC Davis</b> , Introductory remarks
9:45 – 10:20	<b>Tapan Pathak, UC Merced</b> , Impacts of climate change on California's agriculture and tools for managing risks
10:20 – 10:55	<b>Claire Heinitz, USDA-ARS</b> , Mining the National Plant Germplasm System for sources of climate resiliency in perennial crops
10:55 – 11:30	<b>Stavros Vougioukas, UC Davis</b> , Advances in automation technologies and effect on farm workers
11:30 – 12:00	<b>Michelle Leinfelder-Miles - Honoree presentation</b>

## 12:00 – 1:25 P.M. LUNCH (Sequoia Room)

Concurrent Breakout Sessions: 1:25 P.M. – 3:00 P.M.			
<i>SALON C</i>		<i>SALON D</i>	
<b>Session 1 – Nutrient Management</b> Chairs: Mark Cady, Marja Koivunen CEU: 1.5 CCA (Nutrient Mgmt.); 1.0 CDFA INMP		<b>Session 2 – Precision Agriculture</b> Chairs: Nick Clark, Marja Koivunen CEU: 1.5 CCA (0.5 Crop Mgmt., 0.5 Precision Ag., 0.5 IPM)	
1:25	Introductory Remarks	1:25	Introductory Remarks
1:30	<b>Jerome Pier, QualiTech</b> , Getting real about foliar nutrition	1:30	<b>Nick Cizek, FarmTest</b> , On-farm research on your customers' farms with their equipment
2:00	<b>Charlotte Decock, Cal Poly San Luis Obispo</b> , The interaction of soil health and plant nutrition	2:00	<b>Elia Scudiero, UC Riverside</b> , Making sense of high-resolution satellite imagery to improve plant, soil, and water management

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2:30	<b>Sydney Cho</b> , <i>UC Davis</i> , Almond hulls and shells as potassium-rich organic matter amendments	2:30	<b>Peter Larbi</b> , <i>UC Davis</i> , Precision pesticide application technology
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### 3:00 – 3:25 p.m. COFFEE BREAK

Concurrent Breakout Sessions: 3:25 P.M. – 5:00 P.M.			
<b>SALON C</b>		<b>SALON D</b>	
<b>Session 3 – Micronutrients</b> Chairs: Mark Bolda, Nick Clark CEU: 1.5 CCA (Nutrient Mgmt.)		<b>Session 4 – Animal-Plant Systems Management</b> Chairs: Ranjit Riar, Sultan Begna, Sonia Rios CEU: 1.5 CCA (Crop Mgmt.)	
3:25	Introductory Remarks	3:25	Introductory Remarks
3:30	<b>Sharon Benes</b> , <i>CSU Fresno</i> , Micronutrient Nutrition: How much attention should we place on these essential nutrients?	3:30	<b>Rebecca Ozeran</b> , <i>UCCE</i> , Economic and practical investigations of livestock-crop integration in California
4:00	<b>Patrick Brown</b> , <i>UC Davis</i> , 100 Years of boron research – what we know and what we don't know	4:00	<b>Stephen Kaffka</b> , <i>UC Davis</i> , Alternative forages for water-stressed dairies in the San Joaquin Valley
4:30	<b>Bob Beede</b> , <i>UCCE</i> , Zinc: The mighty micronutrient! Factors affecting nutrient uptake	4:30	<b>Amelie Gaudin</b> , <i>UC Davis</i> , Outcomes and challenges in integrating livestock in California cropping systems

### 5:00 P.M. POSTER SESSION AND EVENING SOCIAL (beverages and hors d'oeuvres served) (SALON A)

## Wednesday, February 7

### 6:45 A.M. STUDENT MENTOR BREAKFAST (TIOGA ROOM)

Concurrent Breakout Sessions: 8:25 A.M. – 10:00 A.M.			
<b>SALON C</b>		<b>SALON D</b>	
<b>Session 5 – California IPM toolbox</b> Chairs: Mark Bolda, Sarah Light, Ian Grettenberger CEU: 1.5 CCA (IPM); 1.5 DPR		<b>Session 6 – Soil Management</b> Chairs: Lauren Hale, Sarah Light, Hossein Zakeri CEU: 1.5 CCA (1.0 Soil & Water Mgmt., 0.5 Crop Mgmt.); 0.5 CDFA INMP	
8:25	Introductory remarks	8:25	Introductory remarks
8:30	<b>David Haviland</b> , <i>UCCE</i> , Embracing IPM and sustainability within today's regulatory environment	8:30	<b>Eoin Brodie</b> , <i>Berkeley Lab</i> , Soil Biodiversity in California Agriculture: Framework and Indicators for Soil Health Assessment
9:00	<b>Jhalendra Rijal</b> , <i>UCCE</i> , Tree and nut crops IPM: What's working – What's not	9:00	<b>Michelle Leinfelder-Miles</b> , <i>UCCE</i> , On-farm practices to improve soil health outcomes
9:30	<b>Margaret Lloyd</b> , <i>UCCE</i> , Non-chemical management of soilborne pathogens	9:30	<b>Sarah Light</b> , <i>UCCE</i> , Equipment considerations for implementing regenerative practices

**10:00 – 10:25 A.M. COFFEE BREAK**

<b>Concurrent Breakout Sessions: 10:25 A.M. – 12:00 P.M.</b>			
<b>SALON C</b>		<b>SALON D</b>	
<b>Session 7 – Evolution of pests and management challenges</b> Chairs: Ian Grettenberger, Sonia Rios CEU: 1.5 CCA (IPM); 1.5 DPR		<b>Session 8 – Groundwater Recharge</b> Chairs: Wendy Rash, Mark Cady CEU: 1.5 CCA (Soil & Water Mgmt.)	
10:25	Introductory remarks	10:25	Introductory remarks
10:30	<b>Ian Grettenberger, UC Davis</b> , Insecticide resistance: Diamondback moth and alfalfa weevil as case studies	10:30	<b>Helen Dahlke, UC Davis</b> , Agricultural Managed Aquifer recharge on perennial crops: what to look out for
11:00	<b>Oleg Daugovish, UCCE</b> , Weed management in strawberry and avocado	11:00	<b>Tim Godwin, DWR</b> , Groundwater strategies for implementing the Sustainable Groundwater Management Act: Promoting Ag-MAR in California
11:30	<b>Cassandra Swett, UC Davis</b> , Challenges to genetic resistance-based disease management arising from resistance breaking pathogen strains and potential for stress to compromise resistance gene expression--a case study of Fusarium wilt in tomato	11:30	<b>Lucia Levers, USDA-ARS</b> , The Economics of AgMAR

**12:00 – 1:25 P.M. CA-ASA BUSINESS MEETING AND AWARDS LUNCHEON (Sequoia Room)**

<b>Concurrent Breakout Sessions: 1:25 P.M. – 3:00 P.M.</b>			
<b>SALON C</b>		<b>SALON D</b>	
<b>Session 9 – Bees, pollinators</b> Chairs: Ian Grettenberger, Mark Bolda CEU: 1.5 CCA (IPM); 1.5 DPR		<b>Session 10 – On-farm water management</b> Chairs: Sonia Rios, Sultan Begna CEU: 1.5 CCA (Soil & Water Mgmt.); 0.5 CDFA INMP	
1:25	Introductory Remarks	1:25	Introductory Remarks
1:30	<b>Jo Ann Baumgartner, Wild Farm Alliance</b> , Why incorporating pollinator habitat on the farm not only helps with seed set but is crucial for effective IPM	1:30	<b>Khaled Bali, UCCE</b> , Intermittent groundwater recharge strategies on alfalfa for sustainable production and water conservation
2:00	<b>Elina L. Niño, UC Davis</b> , Protecting pollinators in California's agricultural landscapes	2:00	<b>Daniele Zaccaria, UC Davis</b> , Effects of winter cover cropping on radiation balance & water productivity of micro-irrigated pistachio
2:30	<b>Neal Williams, UC Davis</b> , Area-wide approaches to promoting pollinators. Predicting pesticide risk and habitat placement for pollinators in working lands	2:30	<b>Ali Montazar, UCCE</b> , Recent advances in California avocado water management