

Twenty Fourth Annual



## CONFERENCE

Nutrient Management:  
Challenges and Opportunities

October 26-27, 2016  
Modesto, California  
DoubleTree Hotel

Early registration  
deadline:  
**October 2, 2016**

Grower, CCA, and PCA credits  
have been applied for.  
Student registration is  
available.

The California Department of Food and Agriculture's (CDFA) Fertilizer Research and Education Program (FREP) and the Western Plant Health Association (WPHA) present a one and a half day conference on managing agricultural nutrients. The broad agenda is geared toward a range of agriculturalists, including agricultural supply and service consultants, growers, university extension specialists, crop advisers, and local, state and national governmental agency personnel. Presenters from academia, industry and agricultural consulting will provide general and technical information, current research data, and practical applications addressing statewide and regional nutrient management issues.

### About the joint event sponsors:

The CDFA Fertilizer Research and Education Program coordinates and funds research and projects that advance the environmentally safe and agronomically sound use and handling of fertilizer materials. FREP serves growers, agricultural supply and service consultants, university extension personnel, and local, state and national governmental agencies and organizations.

[www.cdfa.ca.gov/go/frep](http://www.cdfa.ca.gov/go/frep)

The Western Plant Health Association is a not-for-profit trade association that represents fertilizer and crop protection manufacturers, agricultural biotechnology providers, and agricultural retailers in California, Arizona, and Hawaii. WPHA's mission is to promote the environmentally safe and agronomically sound use and handling of plant health products and services for the production of safe, high quality food, fiber and horticultural products.

[www.healthyplants.org](http://www.healthyplants.org)



# CONFERENCE PROGRAM

## WEDNESDAY, OCTOBER 26, 2016

**Facilitator:** Mr. Steve Vasquez, Tessenderlo Kerley, Inc.

- 9:00 - 9:20** **Welcome**  
Renee Pinel, Executive Director, WPHA  
Karen Ross, Secretary, CDFA
- 9:20 - 9:45** **Agriculture and Groundwater Banking for Increasing Water Security**  
Dr. Graham Fogg, Professor, UC Davis Department of Land, Air and Water Resources
- 9:45 - 10:10** **Salinity and the Threat to Productivity of Orchard Crops in the Central Valley**  
Dr. Patrick Brown, Professor, UC Davis Department of Plant Sciences
- 10:10 - 10:35** **Evaluating Biochar's Potential in California Agriculture**  
Dr. Sanjai Parikh, Associate Professor, UC Davis Department of Land, Air and Water Resources
- 10:35 - 10:50** **Break**
- 10:50 - 11:15** **Status of the ILRP in the Central Valley**  
Sue McConnell, Section Chief, Central Valley Water Quality Control Board
- 11:15 - 11:40** **CCAs and Compliance with Water Board Regulations**  
Fred Strauss, Branch Manager, Crop Production Services
- 11:40 - 1:00** **Lunch**
- 1:00 - 2:30** **Panel Discussion: Growers' Perspective on Challenges to Improving Nutrient Management and Irrigation Practices in California**  
Moderator: Dr. Karen Lowell, Agronomist, USDA-NRCS
- 2:30 - 2:45** **Nitrogen Management Training for Growers**  
Mark Cady, Senior Environmental Scientist, CDFA
- 2:45 - 3:00** **Break**
- 3:00 - 3:25** **Irrigation Scheduling Using ET-Based Methods**  
Dr. Khaled Bali, Irrigation Management Specialist, UC Kearney Agricultural Research and Extension Center
- 3:25 - 3:50** **Investing in Your Soil: The Role of Organic Matter in Soil Function**  
Rex Dufour, Manager, National Center for Appropriate Technology
- 4:15 - 5:30** **Poster Session: Adapting CropManage for Strawberry and Celery Production in Ventura County - Andre Biscaro, University of CA Cooperative Extension, Ventura County**  
• Strawberry Growth, Nitrogen Dynamics and Nitrate Leaching in Vermi-compost Amended Media - Adrian Broz, CA Polytechnic State University • California Fertilization Guidelines - Daniel Geisseler, UC Davis Dept. of Land, Air and Water Resources • Nitrate Storage and Usage

in Wheat - William Gensler, Agricultural Electronics Corporation, Tucson, AZ • Quantifying N<sub>2</sub>O Emissions from Different On-farm Irrigation and Nutrient Management Schedules in Strawberries - Arlene Haffa, CSU Monterey Bay • Regional Estimates of Nitrate Leaching Potential in California's Agricultural Soils - Efstathios Diamantopoulos, UC Davis Dept. of Land, Air and Water Resources • Managing Drip Irrigation for Productivity and Sustainability in Organic Tomato Production - Jennifer Schmidt, UC Davis • Development of Leaf Sampling and Interpretation Methods for Pistachio and Development of a Nutrient Budget Approach to Fertilizer Management in Pistachio - Muhammad Ismail Siddiqui, UC Davis • Distributed Sensor Network Based Optimization of Agricultural Practices to Assess Nutrient Dynamics and Limit Nitrogen Losses - Oscar Torres, Center for Irrigation Technology, CSU Fresno • Measuring and Monitoring Nitrogen Dynamics in Central Valley Crops in Real Time to Control Nitrogen Leaching - Pappu Kumar Yadav, Center for Irrigation Technology, CSU Fresno • CDFA's State Water Efficiency and Enhancement Program (SWEEP) - Katherine Filippini, CDFA SWEEP • The S. San Joaquin Valley (Tulare Lake Basin) Management Practices Evaluation Program - John Dickey, SSJV MPEP

## THURSDAY, OCTOBER 27, 2016

**Facilitator:** Dr. Steve Petrie, Yara North America, Inc.

- 9:00 - 9:05** **Welcome and Recap**
- 9:05 - 9:30** **Soil Life, Soil Management: What Every Agronomist Should Know About Microbes**  
Dr. Kate Scow, Professor, UC Davis Department of Land, Air and Water Resources
- 9:30 - 9:55** **The Role of Nutrients in Pest Management**  
Dr. Lacey Mount, Agronomist, Dellavalle Laboratory, Inc.
- 9:55 - 10:20** **Ecological Approach to Nutrient Management for Soil Health**  
Dr. Z. Kabir, Regional Soil Health Specialist, USDA-NRCS
- 10:20 - 10:30** **Break**
- 10:30 - 10:55** **Deficiency to Toxicity: The Role of Boron in California Crop Production**  
Dr. Sebastian Braum, Director of Technical Services, The Tremont Group, Inc.
- 10:55 - 11:20** **Nitrogen Budgets in California Rice Systems: What Do We Know and How Can We Improve?**  
Dr. Bruce Linquist, UCCE Rice Specialist, UC Davis Plant Sciences
- 11:20 - 11:45** **Improving N Use Efficiency of Cool Season Vegetable Production Systems with Broccoli Rotations**  
Richard Smith, UC Farm Advisor, Monterey County
- 11:45 - 11:50** **Closing Remarks**

### Continuing Education Units (CEUs)

Grower, CCA, and PCA hours have been applied for. Details will be available at [www.cdfa.ca.gov/go/frep](http://www.cdfa.ca.gov/go/frep)



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A JOINT EVENT

2016

FREP WPHA



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California Department of Food & Agriculture  
Fertilizer Research & Education Program  
1220 N Street  
Sacramento, CA 95814-5607

