



**Fertilizer Research and Education Program (FREP)  
Technical Advisory Subcommittee (TASC)**  
California Department of Food and Agriculture (CDFA)  
2800 Gateway Oaks Drive, Room 101  
Sacramento, CA 95833  
(916) 900-5022

**July 12, 2016  
9:00 AM**

**MINUTES**

**TASC Members**

Dr. Jerome Pier  
Dr. John Bushoven  
Mr. Rex Dufour  
Dr. Eric Ellison  
Ms. DD Levine  
Dr. Barzin Moradi  
Mr. Steve Spangler

**CDFA Staff**

Dr. Amadou Ba  
Mr. Mark Cady  
Ms. Brooke Elliott  
Ms. Kristen Fernandez  
Ms. Natalie Jacuzzi  
Dr. Marja Koivunen

**Interested Parties**

Mr. David McEuen  
Ms. Brittany Munoz

**WELCOME AND INTRODUCTIONS**

Dr. Jerome Pier called the meeting to order at 9:04 AM and welcomed the subcommittee. Mr. Chuck Hornung, Dr. Marc Los Huertos and Dr. Rob Mikkelsen were not able to attend the meeting. Self-introductions were made and a quorum was established.

**REVIEW AND APPROVE MINUTES**

Dr. Jerome Pier requested the subcommittee review the minutes of the February 29, 2016, meeting.

**MOTION:** Mr. Steve Spangler moved to approve the February 29, 2016, minutes; Ms. DD Levine seconded. The motion passed unanimously by present subcommittee members with a vote of 7 – 0.

## **DEPARTMENT, DIVISION, AND BRANCH UPDATES**

Dr. Amadou Ba announced that Mr. Rick Jensen, the Division Director of Inspection Services, retired on July 1, 2016. Mr. Jensen worked at CDFA for nearly 41 years and was Division Director for the last five years. Ms. Natalie Krout-Greenberg, previously the Special Assistant of Inspection Services, assumed the position of Division Director. She has a degree in Nutrition and has been with CDFA for 12 years.

Several bills are moving through legislature. At the branch level, Senate Bill (SB) 27 limits the use of antibiotics in livestock drugs. The governor approved a budget change proposal pertaining to SB27 that will create 8.5 new positions. Out of those, 3.5 will be coming to this branch. Staff is creating duty statements and will be advertising the positions. This branch will be funded through \$550,000 in general funds. This is the first time this branch is receiving general fund money.

Assembly Bill (AB) 1811 for Organic Input Materials (OIM) inspections. The law currently mandates the program to inspect any product that is distributed in California, and those facilities may be anywhere in the world. This bill would change existing law to match USDA-NOP standards, where only high-risk facilities need to be inspected. Since the Food and Ag code may be edited, industry also proposed, that the two-year cycle will be divided into four registration cycle segments, which will relieve the bottleneck of incoming registrations and renewals.

Assembly Bill 2511 pertains to bio-char; it is moving through the legislature.

The Organic Input Materials (OIM) program is a fertilizing material review program in the Feed, Fertilizer, and Livestock Drugs Regulatory Services Branch within CDFA. It is now recognized by United States Department of Agriculture's, National Organic Program (USDA NOP), which means it is equivalent to other material review organizations in the United States, such as Washington State Department of Agriculture (WSDA) and Organic Materials Review Institute (OMRI). If materials are registered with CDFA's OIM program, they may not be registered by other material review organizations. About 1,550 labels are registered for organic use through the OIM program.

## **UPDATE ON NITROGEN MANAGEMENT TRAINING FOR CCAs AND GROWERS**

FREP-funded nutrient management training for Certified Crop Advisers (CCAs). From 2014 to 2016, nine trainings have been held in California. FREP is working with California Pest Control Advisers (CAPCA) and University of California Agriculture and Natural Resources (UC ANR) to plan one more CCA training session in 2017. More CCA trainings will continue to be provided as needed in the future.

Last year, FREP approved a curriculum development grant for a Train-the-Trainer program. Twenty-eight CCAs were interested in being trained to train growers to self-certify.

Thirty-three sessions of FREP-funded grower self-certification training have been held in the Central Valley. Almost 2,000 growers attended and 82 percent of the attendees have passed the examination and received certifications. The passing rate does not take into account the fact that growers were able to retake the test, as several coalitions offered the test on appointment basis. A score of 70 percent was required to pass. Growers who earn the certification are able to sign their own nitrogen management plans. The requirement to get plans signed is only in high-vulnerability areas within the Central Valley.

### **UPDATE ON STATE AND REGIONAL WATER BOARDS PROGRAMS**

The State Water Quality Control Board released the response to the petition of the Waste Discharge Requirements (WDRs) for growers in the Eastern San Joaquin River Watershed approximately two weeks ago. The response took the form of a proposed order to be adopted by the Regional Boards. It indicates that coalitions will continue to be responsible for collecting and analyzing data and submitting information to the Regional Boards. The proposed order requires the coalitions to submit some field level data in addition to post-processed data. The draft order is open for 60 days for public comments, and once adopted, each of the Regional Water Boards is required to adopt agricultural orders that are consistent with the State Board order.

### **DISCUSSION AND RECOMMENDATION OF 2016 FULL PROPOSALS**

Dr. Pier led discussion in reviewing and voting on the 2016 full proposals; 13 proposals were received. TASC voted a majority “yes” for the following three proposals.

- *Development of nutrient budget and early season nutrient prediction model for Citrus*  
Patrick Brown, Saiful Muhammad, and Emilio Laca
- *Online Decision Support Tools for Irrigation and Nitrogen Management of Central Valley Crops*  
Michael Cahn, Allan Fulton, and Patrick Brown
- *Evaluation of certified organic fertilizers for long-term nutrient planning*  
William Horwath

TASC voted a majority “no” for the 10 following proposals.

- *Development of a tool to estimate site-specific soil N mineralization for improved fertilizer N use efficiency*  
Daniel Geisseler
- *Nitrogen Availability and Fertilizer Value of Organic Amendments*  
Daniel Geisseler and William Horwath
- *Demonstration of Efficient Nitrogen Management Practices for Mixed Leafy Baby Vegetables in the Desert*  
Charles Sanchez and Jose Aguiar
- *Field evaluation of N<sub>2</sub>O emissions from alternative fertilizer management practices in California/Southwestern US vegetable production systems*  
Sharon Hall and Charles Sanchez
- *Nutrient Management Seminars to Enhance Fertilizer, Soil, and Plant Health Knowledge Expectations*  
Ruthann Anderson and Mindy Rohan
- *Block-level Yield Prediction for Seasonal N Fertilization Strategies in California's Almond Orchards*  
Yufang Jin and Patrick Brown
- *Evaluation of Biochar for On-Farm Soil Management in California*  
Sanjai Parikh
- *Can nitrification inhibitors increase N use efficiency in almond production?*  
Patrick Brown
- *Training for Irrigators on Integrated Management of Irrigation Systems based on Climate, Soil and Plant Data*  
Trina Walley
- *Validating Leaf Nutrient Critical Values for Citrus*  
Philippe Rolshausen

The subcommittee agreed the FREP staff will send a letter to each of the project leaders, informing them that their concept proposal was selected or denied for funding beginning in 2017.

### **DISCUSSION OF 2017 PRIORITIES**

TASC had a brief discussion of priorities for the 2017 Request for Proposals. In 2016, no submissions were received for the priority titled, "Addressing Challenges and Barriers to Adoption of Management Practices." Discussion ensued on ways to draw research attention to this topic.

### **AGENDA ITEMS FOR FUTURE MEETINGS**

Ideas and suggestions for the future research priorities will be discussed.

**TASC VACANCIES**

Three TASC positions will open in September 2016, and FREP received nine applications for TASC positions. The Fertilizer Inspection Advisory Board will review the applications and select three people to serve on TASC.

**NEXT MEETING**

The next meeting is scheduled for October 27, 2016, at 1:30 PM at the DoubleTree by Hilton Hotel in Modesto, following the Annual FREP/WPHA Nutrient Management Conference.

**ADJOURN**

**MOTION:** Mr. Rex Dufour moved to adjourn the meeting; Dr. Eric Ellison seconded. The motion passed unanimously by present subcommittee members with a vote of 6 – 0.

Dr. Jerome Pier adjourned the meeting at 3:49 PM.

Respectfully submitted,

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Dr. Barzin Moradi  
Senior Environmental Scientist (Supervisory)  
Fertilizer Research and Education Program

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Date