Fertilizer Research and Education Program (FREP)
Technical Advisory Subcommittee (TASC)
California Department of Food and Agriculture (CDFA)
WEB CONFERENCE MEETING
(916) 900-5022

March 8, 2022
9:00 AM

MINUTES

MEMBERS PRESENT
Daniel Rodrigues
David McEuen
Edgar Macias
Dr. Jairo Diaz
Dr. Jan Hopmans
Dr. Jerome Pier, Chair
Dr. Lisa Hunt
Dr. Rob Mikkelsen
Dr. Sebastian Saa
Dr. Tom Bottoms

MEMBERS ABSENT
Dr. Ben Faber

INTERESTED PARTIES
Ehsan Toosi

CDFA STAFF
Dr. Amadou Ba
Dr. Emad Jahanzad
Mark Cady
Dr. Martin Burger
Nicole Nunes
Jennifer Harmon

WELCOME AND INTRODUCTIONS
Dr. Jerome Pier, Chair, called the meeting to order at 9:00 am. Introductions were made, and a quorum was established.

REVIEW AND APPROVE MINUTES
Dr. Pier requested the subcommittee review the minutes of the November 12, 2021, meeting.

MOTION: Dr. Jan Hopmans moved to approve the November 12, 2021 minutes as written; Dr. Tom Bottoms seconded. The motion passed by present subcommittee members with a vote of 10 – 0.

DEPARTMENT, DIVISION, AND BRANCH UPDATES
Dr. Amadou Ba discussed staff changes within CDFA and Branch. Christine Birdsong was appointed to CDFA Undersecretary, coming from the Sun Valley Rice Company. Virginia Jameson, who recently worked for the Department of Conservation, was appointed as Deputy Secretary for Climate and Working Lands, a new position. Within the Branch, Nicole Smith was promoted to Senior Environmental Scientist (Supervisory), supervising the fertilizer inspection field staff.
Dr. Ba stated that the decision to fund a proposal to study ammonia extract materials, that was recommended for funding by this subcommittee was tabled by the Fertilizer Inspection Advisory Board, pending a decision by the National Organic Program on whether to continue to allow the use of these materials in organic production.

Discussion of supply chain challenges and its effect on fertilizer imports into California included Dr. Ba’s description of state and federal budget investments in supply chain infrastructure. The Russia-Ukraine conflict will exacerbate the challenges already taking place in the marketplace. Fertilizer prices are expected to increase while availability will decrease. Dr. Rob Mikkelsen offered to follow up later with information he is aware of in his position with Yara.

**PROGRAM UPDATES**

Mark Cady described progress on the Nitrogen and Irrigation Initiative grant that FREP has undertaken with the University of California (UC) Agriculture and Natural Resources and UC Davis; and progress made on the redesign of the Grower Training Program for Irrigation and Nitrogen Management Plan self-certification.

Nicole Nunes reviewed the new full proposal review process that the TASC adopted last year, including assignment of primary reviewers to each of the proposals.

**2021 REGULAR CONCEPT PROPOSALS**

Dr. Pier led discussion in reviewing and voting on the 2022 concept proposals; 13 proposals were received for the Regular Request for Proposals (RFP).

TASC voted a majority “yes” for the following four proposals. The authors will be invited to submit full proposals.

- The role of irrigation management for improving nitrogen use efficiency for broccoli grown with nitrate-contaminated irrigation water-Decock, C., Cahn, M., Smith, R.
- Black Soldier Fly Frass: A Novel Organic Fertilizer and Soil Amendment-Gebiola, M.
- Development of Precision Yield Monitor for Almond and Pistachio-Brown, P.

TASC voted a majority “no” for the nine following proposals:

- SAMZ-Central: A Satellite-based Agricultural Management Zoning Tool for the Central Valley Agriculture Region of California-Haghverdi, A.
- Regeneration of Sodic Soil with a Liquid Organic Fermented Fertilizer-Cox, M.
- Evaluating the nitrogen budget system in drip irrigated fresh market tomatoes-Stoddard, S.
Towards a minimum nitrogen loss scenario within the tomato root zone using real-time sensor data and predictive modeling-
Rodrigues, J. et al.

Boron Removal from Irrigation Waters: Biological Principles and Derivation of Maximum Crop Tolerance Levels-
Brown, P.

Measuring the impact of using mealworm frass fertilizer with plant-based compost amendment on soil properties and crop yields for urban agriculture-
Walters, T. et al.

Optimization of liquid fertilizer injector management in nurseries and greenhouses-
Spinelli, G.

Measuring nitrogen dynamics in outdoor soilless media nursery production-
Spinelli, G.

Fine tuning fertilizer timing and delivery to further improving nitrogen use efficiency and almond yield-
Niederholzer, F.

PUBLIC COMMENTS

No public comments.

AGENDA ITEMS FOR FUTURE MEETINGS

No future agenda items were discussed.

NEXT MEETING

The next meeting is scheduled for Monday June 6, 2022.

ADJOURN

MOTION: Dr. Rob Mikkelsen moved to adjourn the meeting; Dr. Jan Hopmans seconded the motion. The meeting was adjourned at 12:41 pm.

Respectfully submitted,

ORIGINAL SIGNED BY MARK CADY

Mark Cady
Senior Environmental Scientist (Supervisory)
Fertilizer Research and Education Program

Date 03/15/2022