

**CALIFORNIA AVOCADO COMMISSION
PRODUCTION RESEARCH COMMITTEE
MEETING MINUTES**

December 8, 2021

A web/teleconference meeting of the Production Research Committee (PRC) of the California Avocado Commission (CAC) was held on Wednesday December 8, 2021 with the following people participating:

**MEMBERS PARTICIPATING
VIA TELECONFERENCE:**

Bryce Bannatyne
John Burr (9:09)
Jason Cole (9:08)
Dan Grant
Darren Haver
Catherine Keeling
Ed McFadden
Leo McGuire
Tom Roberts (9:03)
Ryan Rochefort

CAC STAFF PARTICIPATING:

Tom Bellamore
Ken Melban
April Aymami

OFFICIALLY PARTICIPATING:

Dr. Tim Spann, Spann Ag Research &
Consulting
Dr. Ali Montazar, UC Cooperative
Extension

GUESTS PARTICIPATING:

Consuelo Fernandez, Brokaw Nursery
Ben Faber, UC Cooperative Extension

CALL TO ORDER

Leo McGuire, Production Research Committee (PRC) Chairman, called the meeting to order at 9:01 a.m. with a quorum present.

OPPORTUNITY FOR PUBLIC COMMENT

There were no public comments.

**APPROVAL OF MINUTES OF AUGUST 4, 2021 PRODUCTION RESEARCH
COMMITTEE MEETING**

MOTION

To approve the minutes of the August 4, 2021 Production Research Committee meeting.

(McFadden/Rochefort) MSC Unanimous

RESEARCH PROGRAM DIRECTORS REPORT

Dr. Spann informed the Committee that Dr. Monique Rivera, Entomologist at UC Riverside, would be leaving the University at the end of the year to accept a position at Cornell University. Dr. Spann reminded the Committee that Dr. Rivera was hired by UC Riverside to replace Dr. Joe Morse who had retired. CAC considers this an important position since it is responsible for practical pest management research. As such, CAC submitted a letter to the University urging the immediate replacement of this position.

Dr. Spann updated the Committee on the land transfer occurring at the UC South Coast Research and Extension Center in Irvine. Approximately 40 acres of land is being transferred from UC Agriculture and Natural Resources (ANR) to UC Irvine (UCI) for the construction of faculty housing, with the potential for an additional 30 more acres to be transferred later. Although the transfer within the University is essentially finalized, the University will still need to go through permitting with the city of Irvine for development which will likely take several years. Negotiations are beginning in 2022 between UCI, ANR and the researchers whose projects will be affected.

Dr. Spann told the Committee that the grower economic survey they helped to develop was recently completed and presented to the Board of Directors at their November meeting. Ken Melban, CAC Vice President Industry Affairs, shared a summary of the survey results with the Committee. Of 1743 surveys sent out 174 were returned. The returned surveys represented 10% of both the number of growers and the acreage of the industry. Not surprisingly, water was a large part of production costs, especially in district 1 and 2. The survey also showed, despite year to year variation, the industry is overall remaining profitable.

DISCUSSION ITEMS

A. Presentation from Dr. Ali Montazar, Irrigation and Water Management Farm Advisor, University of California Cooperative Extension, USDA Grant Funding for “Improving Avocado Resource-Use Efficiency through Updated Crop Water Use Information and Irrigation Management Strategies”

Dr. Spann introduced Dr. Ali Montazar and explained that Dr. Montazar had received USDA funding to re-evaluate the crop water needs for avocados. Dr. Montazar made a brief presentation to the Committee about the project and explained that the overall goal is to develop an improved crop coefficient value for avocados to be used in calculating crop water needs. The current crop coefficient was developed many years ago from a study that was not initially designed to develop to provide a crop coefficient and it does not account for any seasonal variability in the trees' water needs.

The Committee was very supportive of Dr. Montazar's work and offered to assist in any way they could as the project develops. Dr. Spann explained that CAC's grower

outreach tools would be made available to Dr. Montazar to communicate his results to the industry as the project progresses.

ACTION ITEMS

A. Consider approval of the research proposal “Understanding the Effects of Soil Microbial Community Enhancement on Avocado Stress Tolerance”

Dr. Spann reminded the Committee that this proposal was originally presented to the Committee at their June 29 meeting, but discussion was tabled until their August meeting so it could be reviewed in the context of the other proposals being considered. Following the discussion at the August 4 meeting, the Committee asked for the proposal author to revise the proposal to reduce the project scope and budget. Thus, the revised proposal is before the Committee for their consideration. Discussion ensued and there was general agreement among the Committee members that the topic of the proposal is a worthwhile one, but there was a feeling that if the Committee were to consider funding work on the microbiome a more basic, non-product specific, proposal would be more appropriate. Discussion continued and the issue of funding research for a private company’s product was a major concern. There was no support from the Committee to recommend the proposal for funding.

B. Consider approval of the research proposal “Development of Chloride Mitigation Strategies for Californian Avocado Growers: Technology Review and Treatment Prediction”

Dr. Spann reminded the Committee that they had reviewed an earlier draft of this proposal at their August 4 meeting. Following that discussion, the Committee asked for the proposal to be revised and the budget to be reduced. The revised proposal is what is before the Committee for their consideration. There was concern during the discussion in August of why Dr. Liu’s salary was being included in the proposal rather than being covered by the University. Dr. Spann informed the Committee that Dr. Liu, a member of the chemical engineering department at UC Riverside, holds a 9-month faculty appointment and is only paid for 9-months of the year. The positions are common outside of agriculture where faculty members’ primary task is teaching. Faculty with 9-month appointments commonly ask for salary funding in grants for their additional 3 months of annual salary.

Discussion ensued and there was agreement that chlorides are a major issue industry-wide and this proposal would be a good starting point to try to address this issue. There was some concern among the Committee members that at the end of this project there would be nothing tangible to provide to the growers, rather this project would shed light on potential avenues of research that could develop mitigation strategies that growers could use.

Motion

To recommend funding the proposal “Development of Chloride Mitigation Strategies for California Avocado Growers: Technology Review and Treatment Prediction.”

(Cole/Burr) MSC 8 yea, 1 nay

Motion 21-12-8-2

C. Consider approval of the research proposal on mitigation of cadmium in avocado groves

Dr. Spann began the discussion by reminding the Committee that there were a couple of instances in early 2021 of loads of California avocados being rejected in Taiwan due to elevated levels of cadmium. These incidents followed early detections in South Korea in 2019. Dr. Spann informed the Committee that since the earliest detections in 2019, CAC has been working quietly to understand the cadmium issue. There exist natural cadmium deposits throughout California that can be taken up by some crops, in particular leafy greens in the Salinas Valley. CAC along with members of the handler community has conducted sampling throughout the California avocado growing region, as well as a more detailed sampling at CAC’s Pine Tree Ranch demonstration grove. Dr. Spann shared these results with the Committee and explained that the levels of cadmium in soil appear quite random, change drastically over very short distances, and do not necessarily correlate with levels found in fruit.

Discussion ensued and a major concern from the Committee is that this proposal would only result in more data about the issue but not develop any recommendations for mitigation. Also, since this is not a domestic issue, if a rootstock was found that did not take up cadmium, would the grower community have any incentive to remove trees and replant? The Committee suggested that this may be an item better suited for discussion by the CAC Board of Directors to provide the Committee with some guidance as to what they would like to see done before taking any steps to fund research on cadmium. There was no support from the Committee to recommend the proposal for funding.

ADJOURN MEETING

Leo McGuire, Production Research Committee (PRC) Chairman, adjourned the meeting at 12:12 p.m.

Respectfully submitted,

Timothy Spann

EXHIBITS ATTACHED TO THE PERMANENT COPY OF THESE MINUTES

EXHIBIT A December 8, 2021 Production Research Committee AB 2720 Roll Call
Vote Tally Summary



CALIFORNIA AVOCADO COMMISSION

Production Research Committee

AB 2720 Roll Call Vote Tally Summary

To be attached to the Meeting Minutes

Meeting Name: <i>California Avocado Commission Production Research Committee Meeting</i>	Meeting Location: <i>Teleconference</i>	Meeting Date: <i>December 8, 2021</i>
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Attendees Who Voted	<u>MOTION</u> <u>21-12-8-1</u>	<u>MOTION</u> <u>21-12-8-2</u>
Leo McGuire, Chair	Yea	Yea
Bryce Bannatyne	Yea	Yea
John Burr	Absent	Yea
Jason Cole	Absent	Yea
Dan Grant	Yea	Nay
Darren Haver	Yea	Yea
Catherine Keeling	Yea	Yea
Ed McFadden	Yea	Yea
Tom Roberts	Yea	Yea
Ryan Rochefort	Yea	Yea
<i>Outcome</i>	Unanimous	9 yea, 1 nay