



CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.
Research Management Committee Meeting
Minutes
Tuesday, September 10, 2024

A meeting of the Research Management Committee of the Citrus Research and Development Foundation, Inc. was held on Tuesday, September 10, 2024, at the Turner Ag Center Exhibit Hall, 2260 NE Roan St., Arcadia, FL 34266. The meeting was properly noticed and recorded. The meeting was called to order at 10:02 AM by Chair Aaron Himrod. Roll was called and a quorum was present. Committee members participating were Scott Adkins, Bobby Barben, Holly Chamberlain, Steve Farr, Ned Hancock, Aaron Himrod, Deeley Hunt, Matt Machata, Daniel Scott, Brian Scully, Shannon Shepp, Wayne Simmons, Buddy Strickland, and John Updike.

Mr. Himrod noted that the minutes of the July 16, 2024, Research Management Committee meeting were included with the meeting materials. Dr. Adkins made a motion to accept the minutes as presented. The motion was seconded by Mr. Updike and passed unanimously.

Presentations for Continuation Funding:

Dr. Kranthi Mandadi presented his work on Project 23-018 – “Truck injection-based evaluation of novel anti-CLas chemistries and OTC combinations for Florida citrus and HLB disease management” – He proposed testing five different new compounds, both alone and in combination with OTC. Mr. Dantzler reported that Dr. Mandadi was up to date with his quarterly reports and was requesting a budget of \$106,338 for the next year. Dr. Scully made a motion to recommend approval for Year 2 funding. The motion was seconded by Mr. Updike and passed unanimously.

Dr. Matthew Mattia presented his work on Project 21-025 – “Transgenic capable field site to assess HLB-resistant and other improved citrus” – He noted that the goal of this project was to provide a site where the industry can test transgenic CRISPR, GMO, and GM materials in a single location. Mr. Dantzler added that Dr. Mattia was current on his quarterly reports and that this was viewed as a service project, not your typical research project. In response to Mr. Simmons’ question, Dr. Mattia stated that the last update on this site was in August of last year. Mr. Simmons suggested another update, for which there was general agreement. The budget request for the next year was \$111,221. Mr. Updike made a motion to recommend approval for Year 2 funding. The motion was seconded by Mr. Hancock and passed unanimously.

Consideration of CRAFT Proposal Received in Response to RFP for Large-Scale Field Trials:

Steven Hall, Exec. Director of CRAFT, commented briefly on the CRAFT proposal. They have about 5 years’ worth of good solid data and have engaged a data analysis firm to help with the data research. Mr. Hancock made a motion to recommend approval of the CRAFT Large Scale Field Trials proposal. The motion was seconded by Mr. Strickland and passed unanimously.

Full Proposals in Response to RFP For Mitigation Strategies:

Mr. Himrod noted that the off year of OTC usage has been repealed, and that streptomycin had been removed from the market, which might cast a different light on the proposals.

Mr. Himrod introduced each of the proposals being considered as listed on the spreadsheet showing the rating scores of the SAB and specific committee members:

24-001 – F. Alferez – “Integrating novel copper formulations with Brassinosteroids for citrus canker management” – Dr. Santra has developed a unique formulation called particulate matrix, composed of cellulose and tannin, which has the property of being a neutral, slow-release copper that kills bacteria. Mr. Strickland made a motion to recommend approval. The motion was seconded by Dr. Scully. After further discussion, Mr. Strickland amended his motion to add that Dr. Alferez further test the adjuvant's effectiveness and suggested collecting data on mite and ACP populations as part of the research. The amended motion was seconded by Dr. Scully. After the initial vote, Mr. Himrod asked for a roll call vote. The motion passed with three no votes.

24-002 – F. Alferez – “Integrating a plant defense inducer to alleviate associated adverse effects of OTC therapy and overcome the "off" third year” – The committee noted that there is now no off-year and Dr. Michelle Heck could do this more cheaply. Mr. Dantzler noted that Dr. Heck was not funded federally and would be coming to CRDF for funding. A motion to not advance was made by Mr. Strickland, seconded by Mr. Barben, and passed unanimously.

24-003 – O. Batuman – “Exploring plant defense inducers as complementary strategies to copper application for controlling citrus canker and enhancing citrus greening mgmt in FL citrus groves” – It was questioned why Bayer was not sharing the work they did with plant defense inducers. Mr. Dantzler stated that Denise Manker had suggested they needed one more year of data before deciding whether to commercialize the product. Mr. Updike made a motion to decline funding. The motion was seconded by Mr. Hancock and passed unanimously.

24-004 – O. Batuman – “Evaluation of the breakdown curve of OTC in the plant for control of HLB in the field” – Dr. Dawson presented his staff analysis. It was noted that this proposal had the highest average score of both the SAB and RMC reviewers. Dr. Scully made a motion to recommend funding. The motion was seconded by Mr. Hancock and passed unanimously.

24-005 – S. Santra – “Protecting trees using nano-GRAS IPM strategy” – Ms. Shepp first made a motion to not approve but after further discussion, the committee suggested that Dr. Santra remove the OTC portion and revise the budget. Ms. Shepp then made a motion to revise and resubmit without OTC. The motion was seconded by Mr. Hancock and passed unanimously.

24-007 – S. Strauss – “Short- and long-term assessment of bark, root, and rhizosphere microbiomes and antibiotic resistance genes of oxytetracycline-injected citrus trees” – Dr. Graham gave the staff analysis. SAB noted that a lot of genetic analysis was not useful or needed right away and characterized it as an academic exercise. Mr. Dantzler noted that the member of the SAB who has a thorough knowledge of how OTC would have been approved as a spray product said he would

be surprised if much of this work had not already been done. Mr. Hancock made a motion to decline funding. Mr. Strickland seconded the motion, and it passed with one no vote.

24-008 – C. Vincent – “Improve HLB-affected tree health by basing volume, timing, and location of injection on tree physiology and phenology” – This project was withdrawn because it received federal funding.

24-009 – C. Vincent – “Injury-Free Root Delivery Device for Therapeutics in Young Trees” – After staff analysis and some discussion, Mr. Strickland voted to not approve. There was not a second. Mr. Hancock made a motion to approve. It was seconded by Mr. Barben and passed with one no vote.

24-012 – J. Qureshi – “Abatement of Asian citrus psyllid and HLB through treatments of OTC and systemic insecticides” – Dr. Futch gave the staff analysis. This project had a 2-year budget of \$265,508 and one year was \$134,035. Dr. Scully noted that these studies had already been done. Mr. Hancock made a motion not to fund. It was seconded by Mr. Updike and passed unanimously.

Directed Research Proposal 24-010 – C. Bock – “Citrus black spot – what is the risk of dispersal of inoculum in FL in relation to current quarantine measures?” – Dr. Dawson gave the staff analysis. SAB suggested involving APHIS at the beginning to see what would be needed for regulation. Dr. Adkins noted that Dr. Bock is eminently suited for this because he is a world-class epidemiologist. Dr. Scully moved to approve. Mr. Simmons seconded the motion. There was a lengthy discussion about the APHIS regulatory program. Dr. Scully amended his motion to approve with the option to engage APHIS as deemed appropriate. Mr. Updike seconded the motion and it passed unanimously. Since it was unclear if the amendment to engage APHIS was part of the motion, Mr. Dantzler indicated that he would loop in APHIS regardless.

Consideration of M. Dutt Preproposal – “Rapid production of non-transgenic genome edited citrus plants” – Dr. Dawson gave the staff analysis. Dr. Dutt has shown that he can use CRISPR to make non-GMO, CRISPR-edited citrus, and that it would be good to have a second lab working on this. Mr. Hancock made a motion to invite a full proposal. The motion was seconded by Mr. Barben and it passed unanimously.

Mr. Dantzler went into further detail on the Grove First initiative of Dr. Michelle Heck, et al. Since she was not funded by ECDRE, she will likely come to CRDF for assistance.

Dr. Dawson brought up an SAB concern regarding the need to have a graduate student on Project 24-004 that was discussed earlier. Mr. Dantzler stated that he would discuss this with Dr. Batuman.

With no other business or public comments, the meeting was adjourned at 12:24 PM.

Minutes submitted by Barbara Thompson.