

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.

Research Management Committee Meeting

Minutes

Tuesday, July 18, 2023

A meeting of the Research Management Committee of the Citrus Research and Development Foundation, Inc. was held on Tuesday, July 18, 2023, at the UF-IFAS IRREC, 2199 South Rock Road, Fort Pierce, Florida. The meeting was properly noticed and recorded. The meeting was called to order at 10:00 a.m. by Vice Chair Aaron Himrod. Roll was called and a quorum was present. Committee members participating were Bobby Barben, Larry Black, Steve Farr, Chris Gunter, Aaron Himrod, Ed Leotti, Tom Obreza, Morgan Porter, Daniel Scott, Brian Scully, Shannon Shepp, and Buddy Strickland.

Also participating were Scott Adkins, Jameas Coop, Dave Crumbly, Rick Dantzer, Bill Dawson, Dubois, Stephen Futch, Fred Gmitter, Jim Graham, George Hamner, Mike Irey, Kranthi Mandadi, Anita Neal, Audrey Nowicki, Brandon Page, Amir Rezazadeh, Jim Syvertsen, Leigh-Anne Vigne, Rosa Walsh, Nian Wang, and Mongi Zekri.

Mr. Himrod noted the minutes of the June 7, 2023, Research Management Committee meeting were included with the meeting materials. Mr. Scott made a motion to accept the minutes as presented. The motion was seconded by Ms. Porter and passed unanimously.

Mr. Himrod invited Dr. Wang to give his presentation on the first-year progress of his project 21-028, 'Generation of non-transgenic sweet orange varieties using CRISPR-Cas technology.' Dr. Wang responded to several questions from the committee members and staff. Dr. Scully made a motion to approve the second-year funding of project #21-208 with two caveats: incorporate suggestions from the committee to include red grapefruit and reaching out to grower cooperators for small scale Hamlin plantings to see if it works. The motion was seconded by Ms. Porter and passed unanimously.

K. Mandadi, proposal 23-018, 'Trunk injection-based evaluation of novel anti-CLas chemistries and OTC combinations for Florida citrus and HLB disease management.' Dr. Dawson summarized the project and pointed out concerns discussed during the Scientific Advisory Board meeting. There was much discussion on the necessity of screening by the hairy root assay before moving the OTC combinations into the field. Dr. Mandadi responded to numerous questions from the committee. Concerns were expressed over the likelihood of the compounds in the proposal surviving the regulatory process, and if not, whether it would be better to substitute other compounds. It was suggested that an NDA be signed between the PI and CRDF and that Dr. Mandadi share the names of the compounds, and that staff report back at the next RMC meeting. This was the decision of the committee.

Departing from the order of the agenda, Randy Niedz was invited to discuss Dr. Shatters' NIFA grant which includes testing the effects of a multitude of molecules on HLB, as well as his injection of mature trees with various compounds, bypassing other assays. They are taking the compounds right to the field to see if the treatment works; currently they have 88 molecules in the field and expect to have 150-200 by next year. They are looking for effects on volume and fruit drop. They are currently finishing up the last set of injections and are determining what questions need to be answered from field use. Asked if the PIs need help deciding what compounds to use or funds for monitoring, he did not express an immediate need. They

are currently going through Dr. Scully's list he had begun compiling in consultation with the Indian River Citrus League.

O. Batuman, proposal 23-014, 'Determining the effect of oxytetracycline on Asian citrus psyllid feeding, CLas transmission, and insect microbiota:' Dr. Futch summarized the project objectives, noting the PI complied with the request to include imidacloprid. There was a question on the budget since only 23 days of work for treatments was indicated. Noting that there were positive aspects to the proposal, the committee recommended that Staff meet with Dr. Batuman regarding their discussions and submit a revised proposal that included other antimicrobials and a better explanation of costs.

Z. He, proposal 23-015, 'Integration of OTC trunk injection with root growth enhancement for sustaining citrus production of the HLB-affected groves:' Dr. Graham summarized the project and Scientific Advisory Board comments. Discussion followed that the products have not been tested on citrus to show their value on root health, issues with humeric acid combining with sandy soil, lack of details on methodologies, variability of root effect by soil type, and the need for a root physiologist to be included on the project. It was also noted that very few projects have been approved on root restoration. Mr. Strickland moved to reject funding project 23-015. The motion was seconded by Mr. Leotti and passed unanimously.

N. Killiny, proposal 23-016, 'Assessment of 'Ca. L. asiaticus' population, transmission efficiency, and antibiotic residues after trunk-injection with OTC and FANA in field trees:' Dr. Graham summarized the proposal, noting that FANA has not been in use for very long, and the Scientific Advisory Board did not recommend funding this project. Phytotoxicity issues were identified, as well as the availability of the product, and lack of details for testing with OTC. Dr. Scully moved to reject the proposal. The motion was seconded by Mr. Scott and passed unanimously.

A. Levy, proposal 23-017, 'Improving oxytetracycline upload into the phloem by linking glucose:' Dr. Dawson summarized the proposal. After discussion of the concerns and the budget, not hearing a motion to reject the proposal, Mr. Himrod suggested deferring a recommendation on this project until Staff could address the concerns with Dr. Levy.

S. Santra, project 22-002, 'Management of tree health and huanglongbing disease pressure using advanced Zn formulations:' Dr. Graham explained the two compounds being used on this project which are readily available to growers, and their antioxidant activity in the tree. Dr. Scully moved to recommend that Dr. Santra's project be funded for year two. The motion was seconded by Mr. Leotti and passed unanimously.

Mr. Dantzler brought up Dr. Curtis' PGR trial continuation, a suggestion made by some growers and committee members, especially since some of the initial results were impacted by Hurricane Ian. Also, as more growers inject OTC it is important to understand the role of PGRs as tree health improves, especially on potential benefits of reducing fruit drop. Dr. Scully moved to fund the additional season of treatments. The motion was seconded by Mr. Leotti and passed unanimously.

Mr. Dantzler reported that he was contacted by Mr. Tom Minter representing a consortium of seventy-five scientists (Palisades) who have identified an antimicrobial and a broad-spectrum insecticide that they

believe have particular promise. They proposed a \$55,000 project. None of the products they are testing are used in human health. As additional questions came up on the compounds, it was agreed that more information was needed before the proposal would be ripe for a decision.

There was no new business, and there were no public comments.

The meeting was adjourned at 12:42 p.m.

Minutes submitted by A. Nowicki.