CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.

Research Management Committee Meeting

Minutes

January 20, 2026

A meeting of the Research Management Committee of the Citrus Research and Development Foundation, Inc. was held on Thursday, January 20, 2026, in the Alexander Discovery Center at Bok Tower Gardens, 1151 Tower Blvd., Lake Wales, FL 33853. The meeting was properly noticed and recorded. The meeting was called to order at 10:00 AM by Chairman Matt Machata. Roll was called and a quorum was present. Committee members participating were Dr. Scott Adkins, Bobby Barben, Holly Chamberlain, Dr. John Davis, Steve Farr, Deeley Hunt, Matt Machata, Charlie McKee, Morgan Porter, Daniel Scott, Dr. Brian Scully, Shannon Shepp, and John Updike. Invited new committee members attending were Bill Bohde – replacing Wayne Simmons; Daniel Bott – replacing Larry Black; Riley McKenna – replacing Ned Hancock; and Aaron Nelson – replacing Steve Farr.

Mr. Machata stated that the Minutes of the November 13, 2026, Research Management Committee meeting were included with the meeting materials. Dr. Adkins moved to accept the minutes as presented. The motion was seconded by Mr. McKee and passed unanimously.

Mr. Dantzler introduced four new members of the Research Management Committee and asked each to tell the committee about themselves, which they did.

Mr. Dantzler gave an update on the CRDF Executive Committee meeting held in Gainesville with Yanni Lagos from Soilcea, and Mingder Yang, John Davis and Jim O'Connor from UF, to discuss Soilcea's licensing agreements. Discussed were how the licensing process works and the provisions of Soilcea's licensing agreement.

Mr. Dantzler reported that he continues to work with UF to determine the amount of royalties that CRDF is owed. UF requested another month to compile the information.

He noted that UF puts forth a robust effort to commercialize its IP. Ms. Shepp asked the dates of the licensing agreements, which Mr. Dantzler shared. Mr. Machata expressed his concern with provisions of the agreements, and Mr. Dantzler said he thought Yianni would be open to sublicensing. There were general comments about the desire to learn more detail about the Soilcea agreements as well as adding a new question to CRDF proposals asking if rights to technology or products that might result from the research had been sold to a third party.

Mr. Machata started discussion of the first project, Dr. Nian Wang's Proposal submitted under the Juvenility RFP, 'Shorten the juvenility of non-transgenic Eds1 and Dmr6 edited citrus against HLB.' Dr. Bill Dawson provided an overview of the objectives and budget considerations. Mr.

Dantzler outlined the evolution of proposals from Dr. Wang and the budgetary costs of each, as well as the prioritized list of objectives provided from Dr. Scully. Dr. Scully made a motion to move forward with the most promising methods while exploring the possibility of using mature tissue transformation to speed up the process and clarify licensing issues with the Eds1 and Dmr6 genes. After much discussion and no second, it was decided to postpone a decision until the other projects on the agenda were addressed.

Mr. Machata started the discussion of Dr. Kim Bowman's Proposal 25-012,'Manipulating juvenility-associated tolerance to increase profitability of sweet orange.' He asked Dr. Dawson to summarize the objectives which he did. The proposal outlined several suggestions on reducing juvenility and explained a field test in the works already comparing juvenility to mature budwood that would continue under this project, currently funded with USDA resources. Recommendation of the project failed due to a lack of motion.

The next proposal discussed was C. Messina & M. Dutt, 25-015 'Methods, resources and synchronous evaluation of 14 genes and 12 rootstocks in field conditions.' Dr. Dawson explained that the revised proposal, noting that the number of gene targets and constructs had been reduced from 51 to 14, and that Dr. Dutt will work with the most promising rootstocks on the most promising genes. The Scientific Advisory Board was not supportive because they were not shown details of the targets to enable them to form an opinion on chances of success, and Dr. Stelinski had already been funded for four of these constructs. It was noted that the PIs appeared before the Plant Improvement Committee on January 16th to discuss the proposal Committee members discussed the proposal. Ms. Porter moved to fund Dr. Dutt's portion of the project. The motion was seconded by Mr. Updike and passed.

Mr. Machata asked Dr. Dawson to summarize project 25-014 by Dr. Messina and Dr. Huo, 'Rapid Development of Transgene-Free, Phloem-Enhanced Valencia Sweet Orange for HLB Tolerance via Mature-Tissue CRISPR Editing,' which he did. The Scientific Advisory Board was uncertain of the work of the CTC and the expertise that existed there. Dr. Dawson noted that the difficult part of mature tissue editing was not ending up with contaminated plants, and the experience of the CTC scientists with citrus was unknown. Reviewers were not convinced that increased phloem growth would produce tolerant plants or pleiotropic effects. Mr. McKee moved to confirm the details and experimental design of their proposal, especially regarding mature tissue transformation/CRISPR, and request a reworked proposal with more clarity and reduced budget focused on methodology that is proven to work. The motion was seconded by Ms. Porter and passed unanimously.

Next was project 25-016 by Dr. Messina and Dr. El Mohtar, 'Developing an efficient system to accelerate flowering in citrus seedlings.' The SAB recommended funding only the first objective of the preproposal, focusing on activating positive regulators of flowering, and consider the other

three objectives until later. There was no motion to proceed with funding project 25-016. Staff was directed to seek answers to questions raised by the SAB.

Next, Dr. Graham summarized the preproposal from Dr. Jin, 'Field Evaluation of SAMP-Expressing Carrizo Rootstock for Protection of Citrus Scions Against HLB.' Dr. Jin will collaborate with Dr. Mattia at Pecos Farms. There were questions about how this project differs from a current ECDRE grant on the same topic, whether this can be done in two years, and suggested performing the tests in Florida and reporting the data to UCR to save on costs. Ms. Porter moved to invite a full proposal requesting testing and data collection locally, as well as measuring SAMP peptides. The motion was seconded by Mr. McKee. Dr. Scully questioned whether Carrizo was the best rootstock choice, suggesting choosing 812 or 942 which are more suitable to Florida, and suggested UCR co-fund the project. Mr. Dantzler confirmed that 942 is being used, so why not use both. The motion passed.

Mr. Machata continued with the next preproposal, from Dr. Amit Levy, 'Establishing Orri Mandarin Management in Florida.' Considering that the majority of growers do not grow this variety, the expense of girdling that is required, unsatisfactory results, and problems with phytophthora, Mr. McKee made a motion not to invite a full proposal, which was seconded by Dr. Scully. The motion passed.

Mr. Machata asked Dr. Graham to summarize the next preproposal from Dr. Zhonglin Mou, 'Enabling transgene-free editing in mature citrus.' Discussion centered on the viability of this task, as well as whether the PI can do it. More detail was requested, especially evidence or references supporting the correlation between leaf metabolites and juice chemistry, and specify the work is being done on HLB-infected trees, as well as a reduced budget. Mr. McKee moved to invite a full proposal. The motion was seconded by Ms. Porter and passed.

Mr. Machata introduced the next proposal, 'Ultra-low volume approach to tree injections using a jet injection system for citrus trees,' from Dr. Israel Ojo. Discussion followed on whether any of the OTC registrants were on the project, any relationship between UF and the PI, and the status of licensing their product. Mr. Hamner suggested the PI develop a prototype or prove the concept and come back to CRDF for validation. There was no motion for support at this time.

Next was a preproposal from Dr. Yu Wang, 'Using Machine Learning on Juvenile Leaf Chemistry to Predict Future Sweet Orange Juice Quality.' Mr. Bohde thought this is a tool that Dr. Gmitter and Dr. Grosser may be using on their new varieties, was not certain it would help growers at this time and questioned supporting a mathematician from U of Arizona. It was suggested that more information be sought on the state of the research, at which time the preproposal would again be considered.

Dr. Kim Bowman gave a presentation on his USDA Rootstock Trials with Bearss and Eureka lemons scions, planted in 2018 and 2020, comparing the Bearss lemon cumulative fruit yield by rootstock for the third through fifth years, and the Eureka lemon fruit yield by rootstock for years

2023 through 2025. Previously Eureka was noted as incompatible with many rootstocks. They plan to continue evaluation of trees in the three trials. His findings will be featured in the February issue of *Specialty Crop Grower*.

Mr. Machata returned to project 25-011. It was explained that Dr. Wang's intention was to make EDS1 and DMR6 available to growers as soon as he could and he was trying everything he could think of to do so. After discussion, Mr. McKee moved to obtain more information on the mature tissue CRISPR gene editing issue and who was being funded, Dr. Wang or Soilcea, prior to approving funding. The motion was seconded by Mr. Sherrod and passed.

Ms. Shepp asked if anyone knew about a label on terpene by a group out of Texas.

With no further discussion, the meeting adjourned at 1:24 PM.