

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC. Research Management Committee Meeting Minutes

Tuesday, June 3, 2025

A meeting of the Research Management Committee of the Citrus Research and Development Foundation, Inc. was held on Tuesday, June 3, 2025, at the Lake Placid Government Center Community Room, Town of Lake Placid, 1069 US Hwy 27 N, Lake Placid, FL 33852. The meeting was properly noticed and recorded. The meeting was called to order at 10:04 AM by Chairman Matt Machata. Roll was called and a quorum was present. Committee members participating were Scott Adkins, Bobby Barben, Holly Chamberlain, John Davis, Steve Farr, Ned Hancock, Deeley Hunt, Matt Machata, Charlie McKee, Bo Meador, Brian Scully, Wayne Simmons, and Buddy Strickland.

Mr. Machata noted the minutes of the April 22, 2025, Research Management Committee meeting were included with the meeting materials. Ms. Chamberlain made a motion to accept the minutes as presented. The motion was seconded by Mr. Hunt and passed unanimously.

Mr. Dantzler gave a summary of the budget noting that current research spending commitments are \$1.24 million, which is close to the approved \$1.4 million for the fiscal year ending June 30, 2025. For the upcoming fiscal year, CRDF requested \$1.5 million in new research spending, which would be reduced to \$950,000 if all proposed projects were funded. The legislative ask is \$5.4 million - \$1,240,000. Next year's funding obligations are \$3.8 million for the 66 projects now under contract.

Mr. Dantzler asked Dr. Futch to give an update on the possible DPI Dundee field trial site for transgenics or conventional breeding. Dr. Futch noted that the site is on the top of the hill in Dundee. He projected a slide of the property for reference. It is next to Southern Citrus Nursery, which is shown directly north of the DPI trial site with Maxi Jet to the south of the 40-acre block.

It is well-drained and had citrus on it many years ago. It is in the middle of a 40-acre block. The well is electric. It has a permit that was just renewed, so there is no issue about the availability of the well for use. If more land is needed, there is a separate 18-acre block that has its own well.

It has ideal Ridge-type soil with the potential to plant at least 20 or more acres. It would likely be possible to get a local caretaker to provide caretaking services which would be more typical of a grower type operation and be similar in cost to using a university site where you had UFarm charges and additional fees. You would be leasing and would pay for the electrical service for the irrigation, etc. For transgenics, there would have to be fencing installed around the property. The

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key thing is that it will be there for as long as DPI allows, so long-term trials should not be interrupted.

A. Levy – Improving the Systemic Uptake of Therapeutic Compounds by Trunk Injections – Dr. Levy joined via zoom from Israel. He had three objectives. One was to test three callous inhibitors since callose tends to fill the injection site. The second was to maintain a water-saturated injection site using sealed injection ports, and finally, encourage root proliferation using mesh around the root zones.

The project incurred problems along the way. He used the CREC groves for two years. In the first year, the irrigation system was not working so the first year was lost. Also, yield data was lost the second year because the fruit was picked before it was counted. Dr. Levy talked with Dr. Rogers to address grove management. Dr. Levy is requesting a no-cost extension in order to move forward to obtain yield data. Dr. Levy gave a presentation on what they had accomplished thus far. No action was taken by the committee. Mr. Dantzler will address the NCE with Dr. Levy.

R. Simon, Silvec – Dr. R. Simon, in assistance with Dr. A. Simon, updated the committee on progress towards product and registration. They have acquired the licensure rights to the Citrus Tristeza Virus technology from Southern Gardens, as well as the spinach defensin genes. They wish to apply for a Section 18 emergency exemption, but the application would have to be made by an organization such as CRDF. A motion was made by Dr. Scully to recommend that CRDF sponsor the Section 18 application. It was seconded by Mr. Hancock and passed unanimously.

Dr. L. Stelinski presented his preproposal – Prevalence of 'Candidatus Liberibacter asiaticus' and insecticide susceptibility in Florida field populations of Asian citrus psyllids – Dr. Stelinski has been working on resistance-based monitoring since 2009. For this project, he would sample 8-10 locations throughout Florida. They would like to create a website to show their data. Dr. Scully made a motion to recommend inviting a full proposal. The motion was seconded by Mr. Barben and passed unanimously.

U. Albrecht - Discussion of 2023 rootstock trial injection policy, additional scope of work and budget, continuation of #21-032 – full proposal. This would overlay a chemistry treatment on top of a local rootstock trial with the main goal of deciding when to start OTC treatments. It was noted that Dr. M. Dewdney has federal funding looking at the same thing, but after some discussion, Mr. Hancock made a motion to recommend funding. The motion was seconded by Mr. McKee and passed unanimously.

M. Irey, Southern Gardens Diagnostic Lab – Support of PCR testing, continuation of #21-002C – full proposal. CRDF's financial assistance has been approximately \$260,000 a year, and that would be required to maintain the service going forward. They requested that CRDF cover the expense of two people in the lab, plus the cost of the sampling materials. Ms. Chamberlain made a motion to fund Southern Gardens for another year. The motion was seconded by Mr. Hunt and passed with one no vote.

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C. Messina (25-003) – Six Fifty-one: Production of plants to evaluate fifty-one genes efficacy to increase citrus tolerance to HLB in six locations – full proposal. Mr. Dantzler explained that the idea for the Crop Transformation Lab was for it to be a clearinghouse for transgenic breeding so there would be one place to find out everything about what was being developed. Dantzler explained some of the difficulties Dr. Messina has had, along with possible solutions. Discussion revolved around whether to run everything through the CTC, for which there was general support, at least for the concept.

After discussion, the items suggested to address in a revised proposal were: Would it be possible to reduce the number of sites from six to three and the number of replications from five to a lower number? Make sure this proposal is working closely with the Dutt transgenic proposal to ensure no overlap between the two proposals. Prioritize the 51 genes to a lower number that have the highest likelihood of success. Dr. Scully made a motion to recommend revising and resubmitting. The motion was seconded by Mr. Hancock, but the vote was deferred until after the discussion of the Dutt project preproposal.

Preproposal from M. Dutt – Multi-location field evaluation of transgenic rootstocks budded with non-transgenic scions – Dr. Dutt is happy to work with the transformation lab, but there are logistical issues that need to be resolved. Dr. Scully made a motion to recommend inviting a full proposal with the assurance that this project is working closely and in full cooperation with Messina and the Crop Transformation Lab. Things to address: 1) reduce budget, 2) align with Messina project, 3) prioritize the 30-50 genes to get a more manageable number to evaluate, 4) three sites instead of six sites, and 5) use rootstocks which have a higher probability of registration. The motion was seconded by Mr. Leotti and passed with one no vote.

Dutt, Chater, Grosser (25-002) – Field evaluation of select HLB tolerant sweet oranges on improved rootstocks – full proposal. There was not enough information on selections provided in the proposal and there were excessive costs. RMC, Staff, and Dr. Chater had ideas for reducing the budget. The recommendation was to revise and resubmit with a lower-cost budget.

C. Arrant – Evaluation of commercially available chemicals for use in trunk injection of citrus – full proposal. Mr. Arrant is 14 years old with his parents acting as PIs and collaborators. Mr. Simmons made a motion to recommend funding the project with Dr. Heck as both collaborator and mentor and for the project to be done in concert with Grove First. The motion was seconded by Mr. Leotti and passed with one recusal.

T. Aglave – A Grove-First approach to evaluating curry leaf extracts by direct injection for HLB management project – full proposal. Miss Aglave is a 15-year-old from Strawberry High School. Mr. Simmons made a motion to recommend funding only 2 years instead of the 3 years requested. If a 3rd year is needed, she can request funding at that time. Two years will allow the project to continue while she is in high school. The motion was seconded and passed with one recusal.

H. Yonce – Third year of OTC injections on Valencias in Avon Park at year-2 rate (\$16,000), continuation of #23-048 – full proposal. Dr. Scully made a motion to recommend funding for year 3, with the provision that they provide a comparison of annual results to assist growers in determining if year 3 is cost-effective. The motion was seconded by Mr. Barben and passed unanimously.

H. Yonce – Evaluating Cu/Zn compound for injection into citrus for suppression of HLB. This preproposal failed for lack of a motion to request a full proposal. There was no action taken but the cost for such a small project was questioned, as well as whether the copper/zinc formulation would have to seek full registration if it is not an adjuvant or has current registration.

Yu Wang – Service Contract. Dr. Wang can do residue testing on streptomycin, penicillin, and other things that need to be done. CRDF is awaiting a cost estimate from Dr. Wang, so this project may come before the committee for funding at a future date. No action required.

Next was discussion of the Alico rootstock trial. CRDF is covering the cost of a month of caretaking at \$2,000 until a decision is made whether to maintain the trial.

On the matter of OTC and streptomycin product development, the science is suggesting it does not work as well as originally thought, so it may be put on the back burner.

L. Diepenbrock CUPS project update – The CUPS study is still important, and some study is likely needed. If something is needed, hopefully Ed Leotti will play a strong role in evaluating the need and action to be taken.

Mr. Dantzler notified the committee of UF's intent to license Dr. Nian Wang's invention, and the options outlined in CRDF-UF Research Agreements.

Collaborations with Fundecitrus – Fundecitrus has some plant material that would be interesting to test under Florida conditions. Early discussion with Fundecitrus is that they may be willing to have studies conducted in Florida, pending regulatory approval.

The meeting was adjourned at 2:40 PM.

Minutes submitted by Barbara Thompson.