

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC. Research Management Committee Meeting Minutes Wednesday, June 7, 2023

A meeting of the Research Management Committee of the Citrus Research and Development Foundation, Inc. was held on Wednesday, June 7, 2023, at the Bert G. Harris Jr. Ag Center, Sebring, FL. The meeting was properly noticed and recorded. The meeting was called to order at 10:00 a.m. by Chairman John Updike. Roll was called and a quorum was present. Committee members participating were Bobby Barben, Holly Chamberlain, Steve Farr, Ned Hancock, David Howard, Ed Leotti, Morgan Porter, Daniel Scott, Brian Scully, Shannon Shepp, Buddy Strickland, and John Updike. Also participating were Ute Albrecht, Fernando Alvarez, Rick Dantzler, Bill Dawson, Stephen Futch, Fred Gmitter, Jim Graham, Chris Gunter, George Hamner, Gio Ijpkemeule, Nabil Killiny, Audrey Nowicki, Brandon Page, Adam Patton, Jawaad Qureshi, Annie Simms, and Rosa Walsh.

Mr. Updike noted the minutes of the April 18, 2023, Research Management Committee meeting were included with the meeting materials. Mr. Leotti made a motion to accept the minutes as presented. The motion was seconded by Mr. Barben and passed unanimously.

Mr. Dantzler commented on the budget, which was being considered for approval by the Board, noting that there are currently 52 projects in progress. It was emphasized that RMC should recommend projects it believes should be funded and the board would be responsible for finding the funding.

Mr. Updike introduced the first proposal for consideration, Z. Deng 23-006, 'Evaluating novel gene-edited Duncan grapefruit mutants for resistance to huanglongbing (HLB).' Dr. Scully moved to approve funding for one year for proof of concept. The motion was seconded by Mr. Farr. Discussion included why the trees had not been tested previously for HLB, whether these trees are included in the current UF process to move forward for regulatory approval (they are not), and the downstream effects on fruit quality, yield and tree health. Following discussion of the need to have someone with the university take on the job of registering products, it was decided that, should the project be funded, that word be sent to the university about the need for such a person. The motion passed unanimously.

There was additional discussion of the first right of refusal for new commercialization, as well as the new legislation which gives the FDOC the first right of refusal. Ms. Porter requested that the DOC attorney, Adam Patton, obtain clear answers on this for the Board.

Mr. Updike presented J. Qureshi's project 23-007, 'Maximizing HLB suppression and grove sustainability through oxytetracycline trunk injections integrated with established crop protection and horticultural strategies.' Discussion followed on the number of applications, redundancy, and the fact that the recommended time for application had passed. Also, that the sentiment was to see how effective OTC is before adding other therapies to the production program. Ms. Porter moved to not fund project 23-007. The motion was seconded by Dr. Scully and passed with one opposing vote.

Mr. Updike brought up N. Wang 23-008, 'Utilization of the non-transgenic citrus genome editing technology to generate HLB resistant/tolerant citrus varieties.' It was noted that this proposal was not well

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received by the reviewers. There was discussion of funding on other projects and whether those funds were adequate for this project. There was also a comment that the two genes that were straightforward could be funded and the third be dropped since it was more speculative. Mr. Leotti moved to not accept 23-008 for funding. The motion was seconded by Mr. Barben and passed unanimously.

The discussion continued with R. Brlansky's project 23-021, 'Improved Diagnostics and Determination of Triggers for Citrus Blight.' It was noted his original request was for one year of funding at \$75,000. Mr. Dantzler outlined the history of the committee's consideration of this project and how the PI had dropped the CRISPR component at the committee's request. Dr. Scully moved to drop the canine portion of the project and fund Objective 1 and part of Objective 2 for \$75,000. Mr. Strickland seconded the motion, and the motion passed with two opposing votes.

Mr. Updike moved to the N. Killiny 23-022 preproposal, 'Keep it underground: A multipronged strategy utilizing Bt-toxins and RNA interference to prevent Diaprepes larvae from emerging as adults.' There was a robust discussion of the problem of Diaprepes, but question about why these 12 rootstocks were selected for testing since so few are purchased by growers. In the end, the project was not acted upon. Instead, Ms. Porter made a motion to first request that UF researchers collaborate on Diaprepes and come back with a proposal that represents all their thinking. The motion was seconded by Mr. Barben and passed unanimously.

The discussion continued on continuation funding of the Southern Gardens Diagnostic Laboratory. Ms. Shepp moved to continue support of the lab; the motion was seconded by Mr. Leotti. Since the primary users of the service are companies, should they be billed for the service or asked to support the project? While some felt these lab results were not of primary importance to growers, Mr. Leotti and Ms. Shepp noted the lab funding should continue another year since the industry is deploying innovations in the field, especially OTC. The motion to fund the Southern Gardens Diagnostic Laboratory for another year at \$286,000 passed with two opposing votes.

Dr. Alferez presented his first-year progress on project 22-003, 'Determining best timing for Brassinosteroid (Brs) application to achieve maximum beneficial effects on citrus tree health and fruit yield and quality.' Dr. Alferez responded to several questions from the committee. Dr. Scully made a motion to extend funding in the amount of \$77,041 for the second year of project 22-003. The motion was seconded by Ms. Porter and passed unanimously.

Mr. Dantzler reported that the five invited proposals for the RFP for antimicrobials in combination with OTC have been received. The Scientific Advisory Board is reviewing the proposals in June, and the RMC will receive their reviews and follow with recommendations to the Board in July.

The discussion of RFP for Essential Oils followed, with Mr. Dantzler reporting that Dr. Kranthi Mandadi has agreed to test the essential oils and antimicrobials. In addition to Dr. Scully's list compiled during discussions with Indian River growers, other compounds could be tested by Dr. Mandadi. Consequently, it was recommended that the RFP not be pursued at this time.

Membership on the Plant Improvement Committee was discussed. Committee members were invited to look at the recommended roster and offer comments if they had any. The availability of new rootstock and scion varieties for consideration to move forward will determine how often the committee will meet.

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Discussion of research priorities – There was some discussion by Mr. Leotti and Mr. Hancock who said it would be helpful if growers could eliminate a spray, so adding things to the OTC solution was of high priority. Dr. Scully mentioned OTC with strobilurins and noted two highly resistant compounds. CRISPR and GMO work remains a priority.

There was no other business.

There were no Public Comments.

The meeting was adjourned at 12:23.

Minutes submitted by A. Nowicki