

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.
Minutes of the
Commercial Product Delivery Committee Meeting
May 19, 2015

A meeting of the Commercial Product Delivery Committee of the Citrus Research and Development Foundation, Inc. was held on Tuesday, May 19, 2015 at the Grove House in Lake Wales, Florida. The meeting was properly noticed and recorded. The meeting was called to order at 9:30 am by Chairman Ben McLean. Roll was called and a quorum was present. Committee members participating were: Dr. Timothy L. Anglea; Mr. Larry Black; Mr. Joe L. Davis, Jr.; Dr. Mary L. Duryea (telephone); Mr. David Howard; Mr. Ricke Kress; Mr. Ben McLean; Mr. Jerry Newlin; Mr. Andy Rackley (telephone); Ms. Shannon Shepp; and Mr. Tom Stopyra. Committee members Mr. Peter McClure and Mr. Hugh Thompson did not participate. Also participating were: Dr. Harold Browning; Dr. Jim Dukowitz; Dr. Jude Grosser; Dr. Stephanie Slinski; Dr. Jim Syvertsen; and Dr. Tom Turpen.

Also in attendance were: G. D. Dickinson; Ms. Brandi Goller; Ms. Audrey Nowicki; Mr. Brandon Page; Mr. Wayne Simmons; and Dr. Rosa Walsh.

Mr. Kress moved to accept the minutes of the March 19, 2015 meeting. The motion was seconded by Mr. Newlin and passed unanimously.

Dr. Grosser gave a presentation on various rootstock trials which have been underway for the past several years. He provided an overview of trials of varying sizes at several locations, noting observations of differences between tetraploids and diploids, as well as varied tree health and yields after treatments using various nutrient programs. He indicated it is a tremendous challenge to collect data since the trials are not consistent in size and scope. A field day is being organized with Duda representatives to highlight rootstock trials that they host.

Dr. Grosser reported that his team is currently cooperating with USDA, ARS on a MAC project. Efforts by Agri-Starts, Agromillora and Rucks Nursery will help overcome supply shortages as new rootstocks are released for grower planting.

Asked what the Foundation can do to accelerate his work, his response was continued funding to complete current trials and test different combinations and soil conditions, as well as competent personnel to collect data, and organization of a grower summit to share successes and failures. Future goals are for rootstocks that reduce the frequency of HLB, and rootstocks that protect from HLB without the need for psyllid control. Additionally, transgenics, proteomics, economics, budwood propagation, trained data collectors and a statistical support and analysis team for the breeding and thermal therapy trials were discussed.

Mr. Kress moved to recommend funding for staff to establish a rootstock/scion breeding project manager with coordination of all entities. Seconded by Mr. Stopyra, the motion passed unanimously.

Mr. Black made a motion for Dr. Browning to initiate a fact-finding conference call with UF-IFAS, USDA and DACS to identify and discuss barriers for movement of citrus materials between states for evaluation against HLB. The motion was not seconded and did not move forward. Dr. Browning related that there is a MAC work group with representatives from Texas, California and Florida that is working to overcome these barriers.

Mr. McLean thanked Dr. Grosser for taking the time to present to the committee.

Dr. Browning initiated the discussion of the CPD proposals and funding recommendations outlining the process since the invited proposals were received. The Project Managers evaluated the proposals individually, then met by phone to discuss and comment, with evaluations from the CPDC members who returned their reviews incorporated into their comments. Following was a discussion of each proposal, in the order of CPD topic numbers, followed by the support and service proposals:

#15-031C – Etxeberria, “Development of a laser-based system to deliver antimicrobials to citrus trees: Greenhouse testing”

Mr. Davis made a motion to hold the decision for further discussion later in the sequence of projects, and it was seconded by Mr. Stopyra. The issue of someone else owning and receiving the benefits if funded was discussed, as well as questionable whether this should be considered Research or Product Delivery without proof of concept. A judgment call, it was assigned to CPD due to its relevancy to ongoing CPD activities to deliver bactericides to citrus phloem tissue, and can result in a near-term solution. The motion passed with three dissenting votes.

#15-040C – Triplett, “Rapid turn-around evaluation of up to 1200 promising antimicrobial compounds (or combinations), using the *L.crescens* assay”

Mr. Newlin moved to recommend project #15-040C for funding. Seconded by Mr. Stopyra, the motion passed unanimously without further discussion.

#15-041C – Wang, “Control Citrus Huanglongbing (HLB) using GRAS Antimicrobials”

Mr. Kress moved to recommend project #15-041C not be funded, suggesting that the proposed materials go through the full plant assay instead. Seconded by Mr. Stopyra, the motion passed with two dissenting votes.

#15-043C – Wang, “Rapid turn-around evaluation of up to 25 antimicrobial compounds for efficacy in reducing titers of the bacterium *Candidatus Liberibacter* on diseased 6-year old trees Hamlin on Swingle”

Mr. Newlin moved to recommend #15-043C for funding. Seconded by Mr. Davis, the motion passed unanimously.

#15-037C – Santra, “T-SOL™ antimicrobial for the management of citrus canker and HLB”

Dr. Anglea moved to recommend #15-027C not be funded, seconded by Mr. Kress. Dr. Turpen stated how long the registration process would take is speculative. The product, which moves systemically, is used in other products that have been approved and recommended progress be watched closely for advances in research. *The original motion and second were withdrawn.* Mr. Davis moved to recommend funding. Seconded by Mr. Howard, the motion passed with four dissenting votes.

#936C – Richardson, “FireWall™ Section 18 Grapefruit Field Use Evaluation”

Clarification was made that this project only includes resistance monitoring of grapefruit for canker. Mr. Black moved to recommend funding. Seconded by Mr. Davis, the motion passed unanimously.

#937C – Richardson, “FireWall™ and FireLine Studies to Support Section 18 for Citrus Canker Control in Round Oranges”

Mr. Black moved to recommend funding. Seconded by Mr. Davis, the motion passed unanimously.

#938C – Richardson, “Large Scale Laboratory/Greenhouse/Field Trial Evaluation of Citrus HLB Bactericidal Therapies”

Resistance monitoring in year one was removed, and the number of bactericidal treatment combinations in the study was reduced from 24 to 8. New treatments will be added in 2015 on new test tree plots.

Mr. Black moved to recommend funding. Seconded by Mr. Davis, the motion passed unanimously.

#15-035C – Rogers, “Continuing support of Citrus Health Management Areas”

Mr. Newlin moved to recommend funding #15-035C. Seconded by Mr. Stopyra, the motion passed unanimously.

#15-036C – Rogers, “Correlating pesticide residue analysis with psyllid feeding to improve protection of young trees”

Mr. Newlin moved to recommend #15-036C for funding. Seconded by Mr. Davis, the motion passed unanimously.

#15-038C – Stelinski, “Insecticide resistance monitoring and management in Florida citrus to maintain sustainable control of Asian citrus psyllid within Citrus Health Management Areas”

Mr. Kress moved to recommend to support #15-038C for funding. Seconded by Mr. Black, the motion passed unanimously.

#15-039C – Stover, “Secure site for testing transgenic and conventional citrus for HLB and psyllid resistance”

This project proposes a 10-acre site with a full time technician to oversee maintenance of existing plants, and removal and re-planting where plants are not performing. This project includes collaboration with Texas citrus breeding programs.

Mr. Kress moved to recommend #15-039C for funding. Seconded by Mr. Black, the motion passed unanimously.

#15-030C – Rogers, “Continuing Field Trial Support for CRDF CPDC”

Mr. Newlin moved to recommend #15-030C for funding. Seconded by Mr. Stopyra, the motion passed unanimously.

#15-045C – Zale, “Continued Funding for the Mature Citrus Facility to Produce Disease Tolerant, Transgenic Citrus”

UF, IFAS formed a steering committee including CRDF Project Managers, and plan to bring Dr. Pena in from Spain as an advisor with efforts focusing on getting more out of the program. With any hopeful solution long-term and nothing to commercialize, it was questioned why it isn’t being considered by RMC, or the university funding it.

Mr. Black moved to recommend funding. The motion was seconded by Mr. Stopyra. With only four votes for funding, the motion did not pass. Mr. Black withdrew his motion; Mr. Stopyra withdrew his second.

Discussion followed on the importance of this tool and that if CRDF did not support, the effort would end. In light of upcoming plant improvement analysis, it may make sense to continue until results of that effort are available to guide steps forward. Mr. Newlin moved to recommend funding #15-045C as a one-

year project, allowing time to seek alternate funding. Seconded by Mr. Black, the motion passed unanimously.

#15-029C – Baldwin, “Investigation of HLB-induced fruit drop, reduction in fruit size, change in fruit color and use of heat treatments in the field on fruit and juice flavor quality”

This is one of two proposals resulting from recommendation by CPD and Board that the PI separate the objectives from the pre-proposal into two groups. Discussion focused on the need for additional information here, and whether it is appropriate for public (CRDF) funds to be supporting the work

Mr. Davis moved to recommend #15-029C not be funded. Seconded by Mr. Howard, the motion passed unanimously.

#15-047C – Cameron, “Identify Off-flavor Juice Compounds in Orange, Tangerine and Grapefruit and Test Alternative Processing Methods for HLB Affected Citrus Juice”. This was the second proposal emerging from the pre-proposal discussion in 15-029C above

Mr. Davis moved to recommend #15-047C not be funded. Seconded by Mr. Stopyra, the motion passed unanimously.

#15-033C – Orbovic, “Support role of the Citrus Core Transformation Facility remains crucial for research leading to production of Citrus plants that may be tolerant or resistant to diseases”

Mr. Black moved to recommend funding #15-033C. Seconded by Mr. Newlin, the motion passed with one dissenting vote.

#15-032C – Irely, “Continued Support for the Southern Gardens Diagnostic Laboratory”

Mr. Black moved to recommend #15-032C be funded. Seconded by Mr. Davis, the motion passed unanimously, with Rick Kress of Southern Gardens abstaining.

#15-034C – Roberts, “Continuation of diagnostic service for growers for detection of Huanglongbing in citrus and psyllids to aid in management decisions”

Mr. Black moved to recommend #15-034C be funded for two years to keep synchronous in the future with the other diagnostic project. Seconded by Mr. Stopyra, the motion passed unanimously.

Dr. Browning stated that the list of proposals recommended for consideration of funding would be forwarded to committee members to give each an opportunity to rank in the order of importance prior to the committee making a recommendation to the Board for funding. Final discussion on the ranking will take place at the June 12th CPDC meeting.

Dr. Browning gave an update on the FY 2015-16 draft management contracts and annual work plans, noting that there will be only six or eight CPD topics next year. Final details will be presented for approval at the June 12th meeting.

With no further business, the meeting was adjourned at 2:00 pm.

Minutes submitted by Audrey Nowicki