

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.

Minutes of Board of Directors Meeting

May 27, 2014

A Meeting of the Board of Directors of the Citrus Research and Development Foundation, Inc. was held on Tuesday, May 27, 2014 at the Ben Hill Griffin Hall, Lake Alfred, Florida. The meeting was properly noticed and recorded. The meeting was called to order at 10:50 am by President Tom Jerkins. Roll was called and a quorum was present. Board members present were: Mr. Bobby Barben; Mr. Larry Black; Dr. Lisa Conti; Mr. Joe L. Davis, Jr.; Dr. Mary Duryea (telephone); Mr. Tom Jerkins; Dr. Joe Joyce (telephone); Mr. Ricke Kress; Mr. Ben McLean; Mr. Jerry Newlin; Mr. Wayne Simmons; Mr. Bob Stambaugh; and Mr. Hugh Thompson. Also participating were Ms. Sarah Anderson; Dr. Tim Anglea; Dr. Calvin Arnold; Dr. Elizabeth Baldwin; Dr. Harold Browning; Mrs. Barbara Carlton; Mr. Greg Carlton; Mr. Aedan Dowling; Dr. Jim Dukowitz (telephone); Mr. David Howard; Mr. Mike Haycock; Ms. LeAnna Himrod; Ms. Diane Johnson; Dr. Evan Johnson; Dr. Susan Logue; Ms. Audrey Nowicki; Mr. Taw Richardson; Ms. Olivia Sallfer; Dr. Bob Shatters; Ms. Shannon Shepp; Dr. Tom Turpen (telephone) and Mr. Mitch Willis.

Mr. Kress moved to accept the Minutes of the April 22, 2014 Board of Directors meeting. Seconded by Mr. Davis, the motion passed unanimously.

Dr. Browning introduced Susan Logue, Mike Haycock and Aedan Dowling from Tropicana. In August of 2013 Tropicana undertook an external review of the CRDF research portfolio to evaluate the progress and opportunities for accelerating progress towards solutions to HLB. Dr. Logue shared key points and information. Tropicana/PepsiCo is willing to assist CRDF in organizing and facilitating a more in-depth analysis of what has been learned and how close the various research areas are towards providing solutions. A tool known as knowledge mapping was described as one way to evaluate the status of research in a complex environment. PepsiCo and Tropicana have in-house expertise who will be available to assist in outlining the process and planning a calendar and steps to conduct this evaluation. Dr. Conti made a motion to get a group together to meet with PepsiCo/Tropicana and their knowledge mapping expert to understand what the process is and how to move forward. Seconded by Mr. Barben, the motion passed unanimously.

At the request of Mr. Newlin, Dr. Evan Johnson presented an overview of the research program related to HLB infection of citrus roots and implications on tree health and disease development. Dr. Johnson gave a very informative presentation, integrating research funded by CRDF and involving Dr. Jim Graham and Dr. Kelly Morgan. The discussion which ensued showed the level of interest in this topic and the need to better understand how soil and water conditions can affect HLB.

Finance and Audit Committee: Chairman Hugh Thompson reviewed the April 2014 financial summary. He indicated that Dr. Browning is working on the draft budget for FY 2014-15, and that the Finance and Audit Committee will meet in early June to review the draft budget prior to presentation for approval at the June 2014 Board meeting.

The Finance and Audit committee suggested Dr. Browning take a look at the poorer performing projects and to assess what would be lost if these projects were terminated early. Mr. Thompson made a motion to evaluate the research portfolio with an eye to reduce 10% of the project expense and report back to the Board his findings. Seconded by Mr. Kress, the motion passed unanimously. Dr. Browning estimates a six week time period to conduct this review and bring forth recommendations.

Mr. Jerkins gave a brief report on the first meeting of the USDA, NIFA Citrus Disease Sub-Committee and the process to move the new Farm Bill SCRI proposals forward. Proposals should be reviewed and ranked in fall with the grants being awarded by early 2015.

Long Term Research Funding and Legislative Matters: Mr. Sparks had nothing new to report today.

Commercial Product Delivery Committee: Chairman Ben McLean asked Dr. Browning to present an overview of the four proposals submitted by AgroSource and the discussion that occurred at the CPDC meeting.

1. The first proposal is to support the Section 18 SLN renewal of Firewall® for grapefruit targeting citrus canker. The Section 18 renewal application is currently under review by the EPA. This proposal is a one year proposal for \$75,000 to provide resistance monitoring and to gather data on HLB impacts when the foliar application is made for canker suppression. Mr. McLean made a motion to approve proposal #1 for support to the Section 18 renewal of Firewall® for grapefruit targeting citrus canker for \$75,000. Seconded by Mr. Newlin, the motion passed with one negative vote.
2. The second proposal is for expanding the Section 18 SLN label for Firewall® to target canker on round oranges. This proposal details what data would be gathered this crop season for consideration of a Section 18 application for use on round oranges. Mr. Richardson is requesting \$150,000 per year for two years to compile the economic and related data required to apply for the Special Local Needs registration. Mr. McLean made a motion to approve proposal #2 for expanding the Section 18 SLN label to include targeting canker on round oranges for \$150,000 for year one. Seconded by Mr. Davis, the motion passed unanimously.
3. The third proposal is to develop information on the efficacy of Firewall® and Fireline® which contain Streptomycin and Oxy-tetracycline, respectively. These are AgroSource products that are registered for use in other agricultural markets for bacterial disease control. Preliminary data on these products developed in an assay and the plan in this proposal would rapidly move testing to larger scale field trials to allow an understanding of what impact the products might have on CLas-infected trees. This project has a first year budget of \$904,585. Mr. McLean made a motion to approve the first year of Proposal #3 to develop information on the efficacy of Firewall® and Fireline® for \$904,585 with the caveat to change one of the orange trials to grapefruit. Seconded by Dr. Conti, the motion passed unanimously.
4. The fourth proposal is to begin conduct of studies specific to a regulatory support package that would include residue in treated plant materials, ecotoxicology, soil profiling, resistance monitoring, and other data requirements that are met under GLP protocols. This is a three year project with the first year budget of \$827,600. The presumption is that it will take more than one year to get the full packet of information for registration. Mr. McLean made a motion to approve first year of proposal #4 to begin development of a regulatory packet that would include GLP conditions for Firewall® and Fireline® for \$827,600. Seconded by Dr. Conti, the motion passed unanimously.

A proposal to evaluate soil drenches of products to combat initial HLB infections in young citrus trees was discussed next. The field trial project will be overseen by a consultant with technical support from Dr. Wang. This project activity will involve application of the three materials to new trees to determine if CLas infection can be prevented. The estimated cost for the first year of this 3-5 year project is \$37,224 with year two budget estimate of \$44,000. This would be a two year total of \$81,224. Mr. McLean made a motion to approve the project. Seconded by Dr. Conti, the motion passed unanimously.

A dialogue began on the effectiveness of penicillin and whether it would be beneficial to revisit the research results that have resulted from work to date and to determine what would need to be known to advance penicillin use for HLB n citrus trees. Mr. Stambaugh made a motion to have the CPD committee revisit penicillin by way of presentation from the research team. Seconded by Dr. Conti, the motion passed unanimously. The suggestion was also made to invite Coca-Cola, PepsiCo and Florida's Natural to hear the presentations related to antibiotic use.

Governance Committee: Mr. Stambaugh made a motion to authorize the COO to investigate hiring a full time Florida-based consultant to oversee the antibacterial research and delivery efforts. Seconded by Mr. Black, the motion passed unanimously.

Mr. Stambaugh also made a motion for the COO to investigate obtaining outside council to look over contract language and to help CRDF make informed decisions when the General council of the University of Florida would not be able to represent CRDF. Seconded by Mr. Kress, the motion passed unanimously.

Industry Research Coordinating Committee: Chairman Wayne Simmons reported that his committee would be meeting later in the day after the Board meeting.

COO Report: Dr. Browning had nothing more to add.

New Business: There was no new business to report.

Future CRDF Meetings:

- Board of Directors meeting June 12, 2014 in Bonita Springs

With no further business, the meeting was adjourned at 2:10 pm

Minutes submitted by Jerry Newlin