CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.

Commercial Product Delivery Committee

Meeting Minutes

July 16, 2013

A meeting of the Commercial Product Delivery Committee of the Citrus Research and Development Foundation, Inc. was held on Tuesday, July 16, 2013 at the Ben Hill Griffin Hall, Lake Alfred, Florida. The meeting was called to order at 10:09 A.M. by Vice-Chairman David Howard. The meeting was properly noticed and recorded. Roll was called, and there was a quorum. Committee members participating on site were Mr. Howard, Mr. Kress and Mr. Newlin. Committee members participating by phone were Dr. Anglea, Dr. Duryea, Mr. McClure, Mr. McLean, Mr. Rackley and Mr. Thompson. Committee members not in attendance were Ms. Shepp. Also participating were Dr. Turpen, Dr. Dukowitz, Mr. Black, Mr. Jerkins, Ms. Nowicki and Ms. Johnson, and Dr. Burns. Also participating by phone was Mr. Simmons.

Mr. Kress moved to accept the minutes of the May 22, 2013 meeting. The motion was seconded by Mr. Newlin, and the motion passed unanimously.

Dr. Turpen presented a strategic overview of the CPD project enhancements. He presented practical near-term conditions and where he feels HLB is today. Efforts today are focusing on antibacterial compounds and tolerant rootstock plantings which can be tested in the short term. Dr. Turpen presented a proposed team of scientists/experts to act in an advisory capacity to the antimicrobial projects. The team includes scientists that are experts in their fields of microbiology and cell science, molecular biology, chemistry etc. This team would provide expert opinion and guidance on the criteria to advance therapeutics to field trials and the appropriate design of field trials. Once a plan is defined and budgets set, the plan will come back to the CPD committee for review and recommendations. The committee suggested that a horticulture expert be added to the team.

Mr. Kress made a motion to recommend to the Board approval of the Antimicrobial Advisory SWAT team with the condition that a horticulturist expert be added to the team. Seconded by Mr. Newlin, the motion passed unanimously.

Dr. Dukowitz presented the Research Service Agreement for evaluation of antimicrobial compounds using the *Liberibacter crescens* assay developed by Dr. Triplett for discussion. This service agreement is proposed for one year to provide funding to University of Florida for a rapid turn-around evaluation of up to 1,200 promising antimicrobial compounds (or combinations) using this L. crescens assay. This is much faster turnaround (a matter of days) compared to the assays being performed by Dr. Powell and Dr. Wang. The three assays will provide complementary information on candidate antimicrobial candidates.

Mr. Newlin moved to recommend to the Board Dr. Triplett's Research Service Agreement using L. crescens assay for one year in the amount of \$26,040. Seconded by Mr. Kress, the motion passed unanimously.

Expansion for the two existing RSA'S for testing antimicrobial candidates was discussed, with Dr. Dukowitz requesting the committee consider recommending an increase of \$35,200 (direct cost) to each of the existing RSA's in progress by Dr. Powell and Dr. Wang.

Dr. Turpen explained that many of the enhancements being discussed today include budgets with 'not to exceed' estimates since the time is limited to utilize the FY 2013-14 legislative funding and it will take Staff time to get all of the number firmed up.

Field trial scenarios for antimicrobial candidates and plant growth regulators were presented with 'not to exceed budgets' as well. The first was "Ten antimicrobials against HLB" for \$225,000. The second was "Naturally occurring microbes" for \$75,000. The third was "Multiple apps, low doses 2,4-D" for \$100,000 and finally "GLP residue study" for \$300,000. Scenarios 1, 2 and 3 are all scenarios that would need action now. The 4th scenario is being presented as useful information for the future.

Mr. Newlin moved to recommend to the Board moving forward on scenarios 1, 2 and 3 with presented budgets of not to exceed and scenario 4 as appropriate. Seconded by Mr. Kress, the motion passed unanimously.

The thermal therapy work being done by Dr. Ehsani and Dr. Duan was discussed. The thermal therapy is working and Drs. Ehsani and Duan would like to take their testing to a larger scale along with honing the device for more cost effectiveness. Enhancement proposals from each have been submitted, but they needed to be refined. The committee asked for more detailed proposals from both researchers with appropriate budgets.

HLB-Tolerant Rootstocks were discussed next. Again, the budgets being presented are estimates. Mr. Jerkins noted here that the Board has confidence in their capable Staff and a system they trust. The Board should empower them and with the flexibility needed to get the job done. Mr. Newlin agreed stating that the antimicrobials is one of the short term projects that need to be advanced quickly. Rootstock seed supply, micro-propagation, cold protection for the existing St. Helena rootstock trial, and data collection on rootstock field trials were discussed. The seed supply utilization would need investing to get those seeds and liners budded into trees with the associated costs estimated at \$110,160. Micro-propagation of in-state rootstock liners would require an estimated investment of \$116,640. Cold protection for the St. Helena rootstock trial would consist of building a structure, well, pump, motor and labor estimated at \$83,467. Data collection /coordination of rootstock trial results is estimated to be up to \$140,000, proposing three full time personnel @\$40,000 each including benefits, plus expenses of \$20,000.

A question on the St. Helena trial was raised on whether CRDF could spend funds on equipment? Additional questions on the data collection were raised: Are three people needed to collect the data? Who will be their employer? Would contractors be utilized? These details have not been decided at this point. The committee recommended they not be CRDF employees but would prefer the work to be outsourced with the level of effort, scope of work and methodology better defined.

Mr. Newlin made a motion to recommend to the Board to approve the budgets for seed supply utilization, the micropropagation and the St. Helena cold protection w/the data collection portion to be better defined. Seconded by Mr. McLean, the motion passed unanimously.

Dr. Dukowitz asked the committee to recommend to the Board authorization of Dan Botts/Third Party Registrations request to proceed with a Section 18 endorsement for Clothianidin. CRDF and growers would have to cooperate fully to obtain the necessary information and other support needed before this can be moved forward.

Mr. Kress made a motion to recommend to the Board authorization for TPR to proceed with their request of a Section 18 on Clothianidin. Seconded by Mr. Newlin, the motion passed unanimously. Mr. Rackley stated that extensive support from the grower community will be needed to develop a stewardship program to lessen the impact on pollinators.

Mr. Howard brought up the Powell and Wang RSA's again for a motion on increasing the budgets of the graft based assay and the soil microbial assay. <u>Mr. Kress made a motion to expand the capacity and budget for the two RSA's in effect by \$35,200 each. Seconded by Mr. Newlin, the motion passed unanimously.</u>

Dr. Dukowitz gave a brief quarterly report on the Commercial Product Delivery products.

Mr. Kress commented that it is vital that growers be kept informed of the fast moving progress of CPD projects. Mr. Jerkins said that while Dr. Browning presents frequently to various organizations, the Board and committees should publicize these actions to their contacts at every opportunity. A suggestion was made to highlight a project in each issue of the CRDF *Grower Report*.

With no further business, the meeting was adjourned at 12:50 P.M.

Minutes submitted by Diane Johnson