



CITRUS RESEARCH & DEVELOPMENT FOUNDATION GROWER RESEARCH REPORT

Volume 4 Issue 7

April 2015

CRDF MOVES FORWARD WITH 2015 PROJECT CONSIDERATIONS

During February and March, CRDF staff, committees and the Board have been planning for next phases of funding to develop and deliver solutions to HLB and citrus canker, taking into consideration a number of factors:

- Maturity of significant numbers of current CRDF-funded projects by June 30, 2015
- Announcement of USDA, NIFA, SCRI Citrus Disease Research and Extension Program awards
- Implementation of USDA, APHIS MAC “shovel-ready projects” to deliver HLB research
- Advances emerging from the research and delivery portfolios of CRDF and others
- The greatest needs of the Florida industry in its fight against HLB

CRDF has representation on both the USDA, NIFA Citrus Disease Research and Extension Program and on the USDA, APHIS Multi-Agency Coordination Group, and is able to recognize how these programs will contribute to the overall effort. In addition, recent discussions with the California Citrus Research Board and Brazil’s Fundecitrus provide a context for CRDF to use in bridging gaps in funding, and where CRDF is best suited to provide the leadership to move solutions to the field.

CRDF staff have been communicating with investigators to understand their progress and next steps for their programs, and has requested pre-proposals to consider in identifying projects that might require funding in the next period. The CRDF Research Management and Commercial Product Delivery (CPD) Committees met in March to evaluate the list of maturing projects and to request follow-up on those of greatest interest. This was followed by the Board approving lists of CATP15 research project ideas to be invited for full proposals, and a similar list of Commercial Product Delivery ideas to be invited for full proposal consideration. The CRDF website citrusrdf.org lists 28 projects in the CATP research area, while a parallel posting lists 20 Commercial Product Delivery ideas approved for full proposal submission.

The next steps in this process will be receipt and review of proposals coming from both research and CPD invitations.

Upcoming Board and Committee Meetings

Apr 28th Board of Directors

Lake Alfred 9:30 am

These reviews will involve outside experts, the CRDF Scientific Advisory Board, staff, Project Managers and the committee members. Parallel development of the FY 2015-16 CRDF budget will allow for estimation of costs to continue ongoing projects and amounts available to fund new projects. Recommendations from the Research Management Committee and the Commercial Product Delivery Committee will be presented for consideration at the June Board meeting, allowing approval of those projects deemed important to support. Projects will be contracted with July 1, 2015 being the general start date.

A critical responsibility for CRDF going forward is the coordination of efforts across the expanding funding programs to ensure that the most critical research is supported. Communication with the other programs is essential to prevent gaps in funding, as well as to avoid overlapping funds committed to similar project ideas. The related challenge will be tracking progress in these programs as their projects move forward, as each program has its own progress reporting requirements and timelines.

CRDF-SPONSORED HLB-TOLERANT ROOT-STOCK TRIALS ARE BEING PLANTED

Among the more likely long-term solutions to HLB that will lead towards stability and economic viability is implementation of citrus scions and rootstocks in new plantings that provide partial to full tolerance or resistance to HLB infection and disease development. This has been a primary long-term objective of CRDF since its inception, as well as being a key focus of the University of Florida and USDA, Agricultural Research Service (ARS) citrus breeding programs in Florida. Greenhouse and field trials of many sizes have been put in place, and natural infection by bacteria-laden Asian citrus psyllids is providing disease infection pressure to these field plantings.

Much attention has been paid to field sites such as the UF, IFAS St. Helena field trial, as well as trials on the Picos Road Farm of USDA, ARS.

These trials have a number of different rootstocks or scions in small replicates, allowing direct comparisons of a large number of genotypes under similar location and management practices.

The next test of the best of class is to plant larger-scale plots of promising rootstocks in commercial-scale trials, where larger solid plantings of each candidate can be evaluated while maintaining a replicated design which allows statistical analysis of data being collected. In 2013, CRDF began planning for such trials, including the following activities and goals:

- Encourage UF and USDA breeding programs and administration to consider early release of promising materials to make them available to anyone who wishes to plant them
- Overcome barriers in propagation of new rootstocks, including lack of seed and variable growth characteristics
- Engage nurseries in working through licensing and propagation challenges
- Design and implement commercial-scale field trials of best-of-class rootstocks from UF and USDA programs
- Develop a mechanism to evaluate new field trials so that growers can track progress and learn from these sites across the state.

In March, the first of three phase I commercial field trials was planted, involving 5 replicates of new rootstocks as well as two standard rootstocks commonly used in each area. All rootstocks were propagated with a common Valencia clone to allow side-by-side comparison of growth, disease progression, and when appropriate, yield and fruit quality determination. The field trial grower cooperators were chosen from solicitations to the industry for those interested parties, and the CRDF Board selected the finalists using a lottery draw.

The planting in Southwest Florida was installed mid-March by A. Duda and Sons, following the protocols and plot designs provided by CRDF. Adequate numbers of each rootstock were planted in each replicate to allow buffer areas between plots and to observe how each rootstock performs when placed in a solid planting. Data will be gathered from this and the subsequent plantings by the grower cooperators, CRDF field trial team, and the UF and USDA citrus breeding teams. Field days at appropriate intervals will be planned and communicated to the industry.



The complementary plantings of Phase I will be installed in the next 60 days by cooperators Ben Hill Griffin Citrus and Peace River Packing Co.