An Update on CRDF Project Activities

By Harold Browning

As the 2013–14 harvest season gets into full swing, CRDF is actively pursuing research projects and delivery opportunities to meet the challenges of the industry. There are many projects in place that are advancing across the broad front of topics related to huanglongbing (HLB) and Asian citrus psyllid (ACP). In addition, CRDF is receiving the next round of research proposals for review and consideration for approval at the February 2014 CRDF board meeting. These projects and those delivery projects identified for enhancement with the FY 2013–14 state legislative funding, complement work already under way, and focus on near-term solutions that can be added to the current HLB management system for young trees as well as existing mature groves.

The Citrus Advanced Technology Program (CATP13) yielded 131 pre-proposals which were reviewed and evaluated, resulting in the invitation to submit full proposals for approximately 50 of those pre-proposals. In some cases, principal investigators were requested to combine efforts or to consider cooperative development of the full proposal.

Looking forward, full proposals will be subjected to two levels of peer review, first by anonymous ad hoc reviewers who have expertise in the topical areas of the proposals. Their comments and rating will be provided to both the Scientific Advisory Board, whose members will individually evaluate each proposal for scientific merit and practical value, and the CRDF Research Management Committee (RMC). Each RMC member is assigned review responsibility for a set of proposals. Out of the RMC meeting comes a set of recommendations for consideration by the board at its February meeting, leading to approval of those proposals that are deemed most valuable to complement ongoing work and build on the best results today.

On the Commercial Product Delivery front, the Commercial Product Delivery Committee (CPDC) and program leadership continue to develop detailed plans for a range of near-term projects that are prioritized to assist growers in the short term. Among the project areas are:

- Field testing of antimicrobial chemicals whose target is reduction of HLB bacteria in infected trees. Field trials are being designed to address rates, formulations, application methods, and overall, to evaluate efficacy in reducing bacterial titer. If successful, chemicals being tested can then move through appropriate regulatory and manufacturing paths to delivery. This project offers the potential to reverse the health of citrus trees currently infected by reducing the bacterial levels.
- A project with similar goals is the use of thermal therapy provided by solar energy. Preliminary field results with enclosing infected trees with plastic “tents” looks promising, and CRDF is supporting efforts to move this preliminary success to practical field use.
- Evaluation of the potential use of plant growth hormones to positively influence health of infected trees and perhaps to reduce likelihood of premature fruit drop is advancing, with plans moving forward for spring 2014 field trials to complement current greenhouse and field efforts.
- Continued efforts to address ACP chemical suppression are under way, with the CPDC working closely with product registrants, regulatory agencies and ACP biologists who are defining the best timing, rates and application methods for season-long ACP control.

As these projects are approved, additional details of these and other ongoing CPDC projects will be provided to the community.

Harold Browning is Chief Operations Officer of CRDF. The foundation is charged with funding citrus research and getting the results of that research to use in the grove.