CRDF Completes New Cycle of Research Project and Review and Approval

At its February 25 Board Meeting, CRDF approved 28 new research projects which address short to long-term solutions to HLB and other citrus diseases. These projects were the survivors of a review process that began with 131 pre-proposals originally submitted in September. Following review by the CRDF Scientific Advisory Board (SAB) and the Research Management Committee (RMC), 49 pre-proposal authors were invited to submit full proposals. The resulting 46 full proposals have been in review since mid-December, 2013. This includes seeking at least 3 anonymous ad hoc reviews from experts in the areas of science associated with the project proposal. With these written comments, the Scientific Advisory Board conducted their own review over a 3-day January meeting, integrating their analysis with the ad hoc review comments. Their scoring and comments were considered when the RMC met in February. This 12-member committee of citrus production managers considered the scientific merit of each proposal and, more importantly added their assessment of the practical utility of the project’s results.

Another dimension of this process is the review of progress of ongoing projects funded by CRDF. Recent progress reports and other details of each active project were provided to the SAB and RMC so that these could be considered in the context of new project proposals. The SAB discussed and gave program managers feedback on the continued value of each project, and suggested follow-up where needed on projects whose progress was not clear or appeared to be inconsistent with the approved plans.

The 28 approved projects include 24 focused on HLB and 1 project each focusing on management of citrus canker, citrus black spot, citrus blight, and Diaprepes root weevil. The projects are spread across priorities focusing on the pathogen (7), the insect (5), and the plant response (11).

With a cycle that requests and evaluates new proposals each year, CRDF is able to remain focused on the major objective areas and to bring on board new ideas in a timely manner. It also allows the ongoing analysis of progress that leads to moving solutions to field trials and into the hands of growers. We feel this annual cycle, combined with up to 3-year projects, provides a balanced approach to exploring, evaluating, and refining tools for use against HLB, canker and the other diseases of interest to citrus growers. The CRDF web page provides additional information on the projects currently funded by CRDF, as well as progress reports that are submitted quarterly for each funded project.

CRDF’s Commercial Product Delivery Committee Discusses Tools with EPA

The urgency of moving research results to grower tools requires CRDF to pursue parallel pathways that include field evaluation, seeking commercial partners, and evaluating regulatory requirements. Most tools that target a pest or disease are subject to some level of regulatory oversight at the state and federal level. Several agencies, including State Departments of Agriculture, the U.S. Environmental Protection Agency (EPA), the Food and Drug Administration (FDA) and USDA, Animal and Plant Health Inspection Service (APHIS) have responsibility for oversight of pesticides and other agricultural technology. CRDF has met several times over recent years with the US EPA to discuss potential technologies that are being developed in response to HLB, and have provided opportunities for the agency to gain perspective on the situation in Florida with HLB and the significant risks that the industry is facing.

Over the past month, three specific activities have been conducted to move forward CRDF understand-

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The first was participation in an EPA Science Advisory Panel Meeting to discuss issues surrounding the emerging technology referred to as RNA interference, or RNAi. The panel heard testimony from scientists and regulators who offered background on RNAi and how it differs from other technologies which are regulated. The EPA will take the information and discussion of RNAi oversight into consideration as they develop regulatory protocols. In early February, representatives of CRDF also met with EPA to discuss the issues surrounding an application for Special Local Needs Section 18 Registration of Valent's Belay® neonicotinoid insecticide and its intended use against Asian citrus psyllid on young trees up to 5 years of age. Following this meeting, the application packet for the SLN Label was submitted to the Florida Department of Agriculture and Consumer Services and is being considered. Successful approval of the expanded use of this insecticide will increase our ability to control ACP and reduce HLB infection and spread as young plantings grow through vulnerable periods.

Finally, CRDF met recently with EPA to discuss antibiotic strategies, highlighting the various groups of chemicals that are being evaluated for use in reducing CLas titer in citrus trees. Discussion focused on those materials that have the shortest pathway to delivery, including satisfying regulatory requirements. Discussion and suggestions will facilitate prioritizing directions and resource allocations as CRDF moves forward to get these potential solutions into the field.

The urgency associated with advancing injury to Florida citrus from HLB demands that we pursue multiple tactics for ACP, the pathogen in infected trees, and to deploy any plant tolerance or resistance that appears to show promise. Since regulatory oversight is vital to all of these directions, we are fortunate to have strong relationships with the Florida Department of Agriculture and Consumer Services, as well as the US Environmental Protection Agency. There is more work to be done, and this phase of aligning emerging research data with the need to address regulatory considerations is an important part of delivering solutions.

**Solutions Page on CRDF’s Webpage**

CRDF and other sectors of the industry continue to receive communications regarding possible solutions that could contribute to management of HLB. These ideas take many forms, from formal commercial product representatives submitting evidence for their products, to untested ideas from the general public. It demonstrates the breadth of visibility of the challenge of HLB to the Florida citrus industry and the desire of many to contribute to solutions. These ideas often pass through many hands before they reach CRDF, and we are interested in screening all ideas that come forward.

To that end, CRDF has established a utility on our webpage that allows those who have ideas to provide some simple information to assist us in screening the idea and how it might be useful. In the lower right corner of the home page is a panel that requests that anyone with an idea on how to fight ACP or HLB provide contact information, brief description of the idea, and what they feel CRDF can do to assist evaluating the idea. A special email address (solutions@citrusrdf.org) has been set up to receive these ideas. This will allow our program managers to quickly screen ideas and to get back in touch with the people responsible.

We encourage all of you to refer those with ideas to this web utility so that CRDF can follow up. Many new ideas and materials have come to CRDF from outside of the community, and we anticipate that others worthy of being evaluated are out there.

**Thanks**

CRDF wishes to express thanks to all members of the citrus industry and allied industries who share their time and resources in seeking solutions to HLB. We also express both our appreciation for the research community who has joined this fight, and the urgency of need for solutions. Individuals and organizations alike believe that through committed efforts, solutions will be discovered and made available to reverse the impacts of HLB. The contributions made by many include: seeking funds to support the research; service on committees and the board of CRDF; tireless experimental investigations; and advocacy of ideas that will keep the industry intact through these difficult times. Foremost, we acknowledge that growers who are willing to try new practices and host field trials ultimately will discover how this disease can be managed and how tools can be integrated into a sustainable management system. CRDF salutes the tenacity of Florida citrus growers.