



HOW DOES THE CITRUS RESEARCH AND DEVELOPMENT FOUNDATION FUND RESEARCH?

Going into the third year of funding research since its establishment in 2009, CRDF uses procedures and processes to make decisions on contracting research that are adapted from the best standards of other science funding organizations, including national and state funding agencies and research institutions that invest internally in research of interest to stakeholders. This process involves soliciting proposals for planned projects that address priorities established by the organization, followed by rigorous review and approval of the best proposals for funding support.

In this newsletter, we will describe in more detail how the CRDF process is being used to address HLB and other important priorities. We also will provide a perspective on the funding process itself and how grower and other funding sources blend to support this vital research.

Prioritization: Since the detection of HLB in Florida, the industry has worked closely with in-state research groups to determine what is most important in responding to this disease, along with citrus canker and other challenges. In addition, citrus growers contracted with the National Academy of Science, National Research Council to establish a plan for research, leading to a list of research priorities.

At the national and international level, significant effort is being made to stay abreast of research opportunities and needs related to citrus diseases, and these discussions help shape and update CRDF research priorities. International HLB Conferences held every other year and coordinating efforts by USDA as part of the Citrus Health Response Plan (CHRP) are just a couple of examples of how HLB research results and ongoing priorities are staying current. We are tracking progress and requesting new project proposals where results of existing research are promising, and filling gaps where opportunities arise with new results.

Seeking the Best Research Ideas: Building on over fifteen years of Florida Citrus Production Research Advisory Council (FCPRAC) success in supporting research projects important to the industry with grower dollars, CRDF uses an annual process that involves requesting pre-proposals, a method to capture ideas for research that

doesn't require extensive proposal development. The pre-proposals are reviewed and the Scientific Advisory Board assists growers serving on the Research Management Committee (RMC) in choosing pre-proposals to be developed into full proposals that are a best fit to production priorities. In this manner, there is little cost in requesting and reviewing a large number of ideas from which to invite those of highest quality and impact for further development. This process occurs in late summer each year, and full proposals are invited for submission in November. Details of this year's process are provided below.

Review and Approval of Proposals: Full proposals are subject to close scrutiny by the grower research committee, who is very interested in making sure projects are relevant to the needs and have application to developing and delivering solutions. They are best equipped to assess how applications from the research could be implemented in the groves. This is an important opportunity to listen to the research community about both emerging technologies and emerging disease threats. Likewise, researchers gain valuable feedback on the constraints of adopting innovations, including specific performance criteria and cost. However, the quality of the research being proposed must also be assessed, and for this, CRDF relies on recommendations provided by peer scientists, who read and discuss the proposals and provide evaluation scores and comments to the grower committee for their consideration. The peer scientists, who represent the areas of science found in the proposals, are asked to assess the validity of the ideas, whether the correct protocols for conduct of the research are being proposed, and the qualifications of those proposing the research. In this manner, the Committee can select projects to support that are solid scientifically in addition to having value in providing practical solutions.

Review of the current set of full proposals is currently underway. At the end of the review process, the Research Management Committee recommends a set of projects to be funded, and following CRDF Board of Directors' discussion and approval, the projects move forward for contracting.

(Projects continued from page 1.)

(Projects continued from page 1.)

Contracting Approved Projects: CRDF accepts projects that range from 1-3 years of duration. Since we work with annual funding cycles and availability of funds one year at a time, we have implemented strict controls that insure that projects underway warrant continued funding from one year to the next. Approved proposals lead to contracts between CRDF and the performing institutions. Specific requirements must be met in order for projects to be continued from years 1 to 2,

and from years 2 to 3. Included are quarterly progress reports submitted by the investigator, as well as expense reports and invoices submitted against a timeline by the performing institutions. Since these reports are posted to the CRDF website (www.citrusrdf.org), they are available for everyone to read and evaluate. Progress is evaluated for continued funding and when considering new project proposals to avoid unproductive duplication.

WHERE DOES THE MONEY TO FUND CITRUS RESEARCH COME FROM?

Florida’s citrus industry has been committed to fueling the search for solutions to HLB and canker, and is utilizing grower funds from two sources. The first is the grower research box tax, a referendum that allows for up to 3 cents to be collected per 90-pound box of fruit harvested in Florida. These funds are collected and managed by the Florida Department of Agriculture and Consumer Services, and made available to CRDF to support grower-driven research. The other primary source is the promotion and marketing box tax program, overseen by the Florida Citrus Commission and managed by the Department of Citrus. Funding from this source is made available for support of CRDF projects through a contract between CRDF and FDOC.

Another important source of funding from the industry is coming from “allied partners”, businesses that are closely allied with citrus growers and who share risks and rewards with growers for successful citrus production, harvesting, processing and packing, and ultimately marketing. Voluntary commitments amounting to almost \$4 million to date from this sector have provided important complementary support for the research.

In addition to these sources, federal and state funds are leveraged when possible. This is sporadic and unpredictable, and although it is of great assistance when available, it cannot be relied upon on an ongoing basis to support the research projects. Industry organizations play a vital role in interfacing with state and federal agencies to negotiate funds for use in citrus research.

THE PORTFOLIO OF CURRENT FUNDED PROJECTS AND A LOOK AT THE NEW CYCLE OF PROPOSALS

Half-way through the current fiscal year, CRDF is contracting the first, second or third years of approximately 109 ongoing research projects, at a cost for this year of just over \$14 million.

With a specific focus on solutions to new citrus diseases, the majority of the research is invested in HLB, encompassing exploratory to near-term solutions related to the bacterial pathogen, the Asian Citrus Psyllid vector, and the citrus tree impacted by HLB infection. Secondly, CRDF is sponsoring a number of research projects focused on citrus canker management strategies. Included in this area are projects aimed at better management of citrus leafminer, an insect which complicates spread and infection by canker bacteria. Finally, we also are supporting a few projects on other emerging diseases, including citrus black spot and citrus leprosis, the latter being a disease that currently is not in Florida in the hope that growers will have solutions should it arrive here.

In addition to the projects in our current portfolio, we are receiving the full proposals for CATP11, this year’s call for new proposals. Response to the call for

pre-proposals was strong, with 192 pre-proposals being submitted. Review and evaluation of these led to invitation to investigators to submit full proposals on 115 of the pre-proposals submitted. In some cases, recommendations were made to combine ideas, and as a result, we have received around 100 new full proposals.

As described earlier, these proposals will be subject to peer science review before being evaluated by the grower Research Management Committee for their consideration of funding. Final decisions on these proposals will come in the first quarter of 2012, and contracting of new projects usually begins in April-May following CRDF approval. This will complement the ongoing projects currently funded, and will maintain an aggressive search for short- and long-term solutions for these diseases in Florida.

UPCOMING MEETINGS		
December, 2011		
6	Board of Directors	CREC
January, 2012		
24	Board of Directors Annual Meeting	CREC