

REPORT



CRDF Newsletter Keeps Growers Informed

In order to keep growers up to date on latest research news, the Citrus Research and Development Foundation (CRDF) has created the Grower Research Report.

The report will be published as a monthly insert in Florida Citrus Mutual's Triangle.

The newsletter is a part of the CRDF's communications strategy to keep the citrus industry and scientific community informed about its research and product development activities.

"Growers are making a huge investment in research and it is our responsibility to let them know about the results of the efforts," said Dr Dan Gunter, chief operating officer of the CRDF. "We hope growers find the newsletter and all the other communications from the Foundation helpful, and we welcome your comments."

The CRDF's Communications Plan also includes a periodic columns in *Citrus Industry* magazine and various trade publications. The CRDF's meeting are open to the public and posted on Mutual's website at www.flcitrusmutual.com in addition to www.fcprac.com.

Progress reports on specific research projects are available at www.fcprac.com. The website is an essential tool for management of the 130 plus research projects currently funded by the CRDF. It also serves as a place for stakeholders to get information on specific projects or find links to up-to-date greening and canker news. The CRDF is now upgrading the site to make it even more user friendly.

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What is the Citrus Research and Development Foundation?

The Citrus Research and Development Foundation (CRDF) is a non-profit corporation organized in May 2009 under Florida State laws as a Direct Service Organization of the University of Florida.

The mission of the CRDF is to "advance disease and production research and product development activities to insure the survival and competitiveness of Florida's citrus growers through innovation."

The organization is headed by a 13 member board of directors that includes individuals from industry, academia and government.

In late 2009, a statewide referendum of Florida citrus growers overwhelmingly affirmed the creation of the CRDF.

All the research currently funded by the CRDF is focused on finding solutions for HLB and canker.

Breaking Down the Research

Developing solutions to manage HLB requires a complex network of multi-year projects, especially since scientists lacked basic biological information on the disease's bacterial pathogen and insect vector when the industry's research effort started.

To help growers understand where the research is going, the Citrus Research and Development Foundation has grouped the projects by general research topic areas including

- Understanding the consequences of HLB disease and its effects on everything from juice quality to economic impact
- Growing the HLB bacteria in a laboratory and analyzing the function of all its genes
- Learning about the interaction between the pathogen and the citrus host response. For example, with detailed knowledge researchers may be able to either induce resistance or tolerance to infection.
- Early and less expensive detection
- Understanding the spread of the disease in order to design control strategies.
- Analyzing psyllid behavior
- Studying the psyllid's parasites and predators. This includes various plant volatiles that may repel the insect.
- Understanding how genes may be used to build a tree, diseased or healthy.

(Please see **Research** continued on page 2.)

Research Management

Process Designed to Maximize Efficiency

The CRDF's research management process works like this:

- 1) The Research Management Committee identifies research gaps based on the existing knowledge and any new findings.
- 2) The full CRDF board issues a Request for Proposal in specific areas based on the identified gaps.
- 3) The Research Management Committee requests a review of the research proposals by the Scientific Advisory Board (SAB), a panel of scientific experts.
- 4) The SAB reviews progress reports on existing projects as well as new research proposals and makes recommendations to the full CRDF board on which projects to continue funding or begin funding.
- 5) The full CRDF board approves total funding based on the recommendations from the SAB and the Research Management Committee.

2010 CRDF Research Management Committee

The CRDF's Research Management Committee includes three Foundation board members and nine former members of FCPRAC including:

Bill Barber
Charles Counter
Larry Davis
Steve Farr
Peter McClure
Mike Monroe
Andrew Pike
Jim Snively
George Walker

(Research continued from page 1.)

- Utilizing conventional breeding to provide new rootstock and scion combinations.
- Inoculating trees with a protective virus or bacteria for near term solutions.
- Creating "model systems" in order to do more experiments faster and then transfer discoveries to citrus.

For more detailed information on the research go to www.fcprac.com

NAS Develops Strategic Plan To Combat HLB

A comprehensive report issued last month by a National Academy of Sciences' (NAS) committee of experts contains 23 strategic recommendations for Florida growers to combat HLB.

NAS's National Research Council said the Florida citrus industry has already implemented several of the recommendations but a lot of work still has to be done.

In the spring of 2009, the Florida Department of Citrus (FDOC) contracted with NAS to develop a strategic plan to beat HLB.

A few of the recommendations are listed below. You can find the entire report at <http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=12880>

- Create "Citrus Health Management Areas" in Florida.
- Identify one organization and empower it to have oversight responsibility over huanglongbing (HLB) research and development efforts.
- Create a centralized HLB website and data bank that is accessible to researchers and the public.
- Commission an analysis of the economics of the citrus industry's responses to HLB.
- Organize an enhanced annual international symposium on all aspects of HLB.
- Expand extension efforts emphasizing the importance to HLB management of removing infected trees from groves.
- Improve insecticide-based management of Asian citrus psyllid (ACP).
- Support searches for biomarkers that may be exploited to detect HLB infected citrus.
- Support development of transgenic HLB-resistant and ACP-resistant citrus.

Growers Continue to Invest in Research

In 2008, Florida citrus growers committed \$16.6 million to fund 111 research projects.

In 2009, growers allocated \$2.1 million to initiate 24 new projects.

Consequently, once dead end projects are discontinued and new projects started, the CRDF anticipates a total portfolio of approximately 124 projects representing \$14.3mm will be under management later this summer.

The funded research projects include:

- interrupting the breeding/feeding of psyllids
- vector management
- creating disease resistant plants produced through traditional breeding methods or genetic engineering.
- control of the HLB bacteria and improvement of the host response.

These investments represent a broad spectrum of research expected to yield results that help growers manage disease in the near term (<2 years), intermediate term (2-5 years) and long term (>5 years).

For more information, go to www.fcprac.com

Fiscal Year	Number of Contracts	Amount of Funding
08/09	106+5=111	\$16.6mm
CATP09*	24	\$2.1mm
09/10*	111-11+24=124	<\$14.3mm

* Estimated

Upcoming CRDF Meetings

April 16, 2010 - Research Management Committee Meeting - 9:00 a.m.

April 27, 2010 - Board of Directors Meeting - 9:00 a.m.

May 25, 2010 - Board of Directors Meeting - 9:00 a.m.

June 10, 2010 - Board of Directors Meeting* - 2:00 p.m.

July 27, 2010 - Board of Directors Meeting - 9:00 a.m.

All meetings are held at the CREC, Lake Alfred in the Ben Hill Griffin Hall, Room 3, with the exception of the June 10 meeting which will be held at the Florida Citrus Industry Annual Conference in Bonita Springs.