GROWER RESEARCH REPORT

VOLUME 2, ISSUE 2 SEPT. 2011

Citrus Research Foundation Discusses Field Nutrition Trials

The Research Management Committee (RMC) of the CRDF invited its Scientific Advisory Board Chair, Dr. George Bruening and citrus stress physiology expert, Dr. Jim Syvertsen to join them for a committee meeting and public hearing to assess field trials on citrus nutritional supplements in Lake Alfred on Aug. 24th, 2011. Judging from the crowd of growers and members of the public in attendance, there is great interest in optimizing citrus nutrition.

Individual researchers presented results from 10 different field trials with a wide variety of experimental designs and the panel noted several important open questions for future research emphasis. The RMC took immediate actions to add an additional field trial with a younger planting, to attempt to develop a useful assay for phloem-health and to study the feasibility of creating a system for growers to benefit from sharing their own production experience.

There will be a great deal of risk and continued uncertainty for some time. Optimizing citrus nutrition is subject to enormous variability in yield that is both site and season dependent. Additionally, the rate of decline of HLB-infected groves is highly dependent on the age of the trees at the time of infection and overall condition of the grove, including genotype, environmental interactions, soil, salinity, root disease and the overall level of abiotic and biotic stress already imposed on a specific site. Therefore, it is prudent for production managers to maintain stringent psyllid control and to monitor nutritional status with accurate tissue and soil sampling to look at the effects of staying toward the high side of the traditionally recommended ranges for nutritional supplements in their groves especially if they choose not to remove infected trees.

CRDF to Receive $2 million in Federal Funding to Support HLB Research

Earlier this summer, a commitment of federal support totaling $2 million was made, with the explicit intent to support research on HLB. These funds were committed through USDA and directed to the Agricultural Research Service Laboratory (ARS) in Ft. Pierce. CRDF has been working closely with USDA, ARS to develop a plan for use of these funds in support of the HLB research currently contracted by CRDF, and to provide funds complementary to citrus industry box tax dollars which fund most of the HLB research in Florida. Currently CRDF has 133 contracted research projects, the majority of which directly address HLB and which are budgeted to expend $16 million of support in the current fiscal year.

CRDF has been working closely with Dr. Calvin Arnold at the Ft. Pierce Horticultural Research Laboratory, who is the representative with USDA for these funds. An agreement has been executed and we are awaiting finalization of the funding transfer at this time.

Availability of federal and other non-grower funds to support HLB research has been a pressing issue since the disease was first detected in Florida in 2005, and citrus growers have worked continuously through grower organizations and through CRDF to attract external funds to build on their own commitments of box tax collected as fruit are harvested. The complexity of the HLB disease system and involvement of the Asian Citrus Psyllid as a vector requires a broad approach, focusing first on projects that have short-term value in answering foundational questions and also providing immediate response opportunities. The CRDF research plan also reached out to a broad array of scientists, engineers and others to address potential long-term solutions that may involve development of future citrus trees that are resistant to HLB infection, or to the use of other technologies to minimize the impact of HLB in the grove.

Within the formation of CRDF in 2009, growers and the foundation also have solicited support from citrus industry allies, those businesses who are closely associated with citrus production and who share the financial risks of HLB spreading in the state. Donations from several such companies have occurred, and these funds are being used directly to support research projects.

Dates to Remember

September 19
Industry Research Coordinating Committee Mtg.

October 1
Deadline to Submit CATP11 Preproposals

October 6
Governance Committee Mtg.

October 18
Research Mgmt. Committee Mtg.

October 21
Posting List of Preproposals invited to Submit Full Proposals

October 25
Board of Directors Mtg.

November 21
Deadline to Submit CATP11 Proposals

December 6
Board of Directors Mtg.

January 24, 2012
Board of Directors Annual Meeting

CRDF Approves Industry Research Coordinating Committee Members

At its August 30 Board of Directors Meeting, CRDF approved the appointment of 12 non-board members to the newly formed Industry Research Coordinating Committee (IRCC). Appointees join Wayne Simmons, a CRDF Board member and Chair of the committee. This committee was established by Board action earlier this summer to assume the functions of the Florida Citrus Industry Research Coordinating Council, an industry support group that has been in place since 1997.

The Industry Research Coordinating Committee is responsible for recommending the research priorities for the Florida citrus industry to the Board that are outside the scope of work of the Research Management Committee, which is currently focused on HLB and other important citrus diseases. This committee will focus efforts on threats or opportunities for all elements of the industry. This committee will perform an annual GAP analysis and, working broadly with the Florida citrus industry, establish research priorities that fall within its scope.

Like other committees and the Board of Directors of CRDF, the IRCC is composed of Florida citrus industry representatives, in this case nominated by The Florida Citrus Production Managers Association, Florida Citrus Processors Association, Florida Citrus Packers, The FDOC Harvesting Advisory Council, the Florida Citrus Commission, and Florida Citrus Mutual. The 13 member committee is:

Wayne Simmons, Chair
Tim Anglea
Mark Colbert
Carson Futch
Kevin Gaffney
Paul Genke
V. C. Hollingsworth
Frank Hunt III
Tom Kirschner
Peter McClure
Paul Meador
John Veldhuis
Mitch Willis

At the organizational meeting of the committee on September 19, the agenda will include reviewing progress to date in establishing industry priorities and planning the annual gaps analysis and reporting. Please refer to the CRDF website for meeting time and details.

CRDF Research Annual and Final Reports Available Online

Below are Annual and Final reports on CRDF-funded research projects which have been posted online since our last issue. The full report can be accessed from the 'Link' button. These and other reports can also be found online at www.citrusrdf.org.

LINK	TITLE	RESEARCHER	HEADLINE
	Effects of Huanglongbing (HLB) disease on quality of orange juice and identification of HLB-induced chemical signatures in fruit juice and leaves	Baldwin	Effects of nutritional sprays on HLB induced off-flavor of OJ
	Combating symptom development in fruit from Huanglongbing-infected citrus trees: A sensory, metabolite and physiological approach	Burns	Combating symptom development in HLB-infected fruit
	Efficacy of seasonal insecticide programs for suppressing HLB in new citrus plantings	Hall	Young HLB-infected trees begin producing, mortality rates low
	Pathogen-Vector Relations between Asian Citrus Psyllid and Liberibacter asiaticus	Hall	ACP salivary gland, a barrier to Las infection/transmission
	Support for the Southern Gardens Diagnostic Laboratory	Irey	Support for the Southern Gardens Diagnostic Laboratory
	Factors influencing acquisition and inoculation of Candidatus Liberibacter asiaticus by Diaphorina citri	Lopes	The HLB pathogen can be rapidly acquired by psyllids
	Development of transformation systems for mature tissue of Florida commercial varieties, and strategies to improve tree management	Peña	The growth room for transformation is not fully operative yet
	Sampling Plans to Guide Decision Making for Control of Asian Citrus Psyllid (ACP)	Qureshi	Evaluation and promotion of sampling techniques for ACP
	Strategies to minimize growth flushes of mature citrus trees with pruning practices and plant growth regulators to reduce psyllid feeding	Spann	Plant growth regulators affect psyllid fitness