

# UF/IFAS Extension celebrates 100 years of excellence

By Tom Nordlie

Throughout 2014, the University of Florida and its Institute of Food and Agricultural Sciences (UF/IFAS) will celebrate the 100th anniversary of the statewide UF/IFAS Extension network and the national system it supports.

Not only will the university commemorate UF/IFAS Extension milestones, personnel ranging from top

administrators to county faculty will use the opportunity to look ahead and renew their commitment to meeting tomorrow's challenges, said Jack Payne, UF senior vice president for agriculture and natural resources.

"We are exceptionally proud of our past Extension accomplishments, but we must never stop moving forward," said Payne, who directed Extension



A CENTURY OF SERVING FLORIDA

programs at Iowa State University and Utah State before coming to UF. "The UF/Extension mission is to share the latest scientific knowledge with people who need it. Science is always advancing, communications technology is always changing. But the importance of our mission doesn't change. We are reminded of that fact every day and it inspires us to try harder, to do better, to meet and exceed the standards set by those who came before us."

Nick Place, dean and director of UF/IFAS Extension, noted that Florida and other southern states were conducting Extension activities even before President Woodrow Wilson formally created the national Cooperative Extension Service on May 8, 1914, when he signed a piece of legislation known as the Smith-Lever Act.

"The need for Extension was evident long before the system was created, and I'm proud to say our faculty members began to meet that need beginning in the late 1800s," Place said, referring to activities based at UF and one of its predecessors, Florida Agricultural College in Lake City.

Those activities included establishing demonstration sites for new crops and management techniques, organizing early 4-H clubs and sending groups of experts around the state by car and train, he said. "Then, as now, Florida's agricultural producers and citizens faced obstacles that could be overcome with know-how, teamwork and determination," Place said. "Florida needs solutions; UF/IFAS Extension delivers them."

Today, UF/IFAS Extension has offices in all 67 Florida counties, with close to 600 agents and specialists and an annual budget of about \$70 million. The state's agricultural and natural resources industries produce 300 commodities; UF/IFAS Extension plays some role with virtually all of them.

Florida citrus production and UF/IFAS Extension have grown together

## Keep your investments growing

with

### SPROUT GUARDS

Sprout Guards may also be custom ordered to any size needed, regarding mechanical harvesting.

★ 30+ YEARS EXPERIENCE ★

★ FREE ESTIMATES ★



Black Sprout Guards, 8" x 20"

★ BEST WRAP, BEST PRICE AND BEST SERVICE ★



Available in 8" x 14" and 8" x 18"

Mike Hurst Citrus Services, Inc.  
(863) 452-6469 • Cell (863) 443-0531

## Holmberg Citrus Nursery



Reg. #47222379

Providing traditional 4-inch sleeves as well as custom produced ultimate resets – 6.5 x 6.5 sleeves.

Several commercial varieties available on Carrizo, Cleo, 897, 802, Swingle and Sour Orange.

Contact us NOW for more information!

Eric Nething: 813-477-4023

Doug Holmberg: 813-335-8800 • Fax: 813-684-3899

13430 Hobson Simmons Rd., Lithia, FL 33547

dougsipad@gmail.com

over the past century, and their relationship has never been closer than it is today, as the industry fights citrus greening disease.

First detected in Florida in August 2005, greening is now present in every major citrus-producing county in Florida. The disease cost the industry an estimated \$4.54 billion and 8,257 jobs during five production seasons, from 2006–2007 to 2010–2011.

Greening is a difficult disease to address, for numerous reasons, says Jackie Burns, director of the UF/IFAS Citrus Research and Education Center (CREC) in Lake Alfred. Among the reasons are that the bacterium responsible for the disease resists laboratory culture; observable symptoms of greening appear after it's too late to save infected trees; greening symptoms are common to other citrus maladies; and Florida has many abandoned citrus groves harboring the invasive insect that spreads greening — the Asian citrus psyllid.

“The challenges posed by citrus greening are unprecedented in the history of Florida citrus production,” said Burns, who's also a horticultural sciences professor. “However, growers have overcome adversity many times before, and UF/IFAS Extension has been with them every step of the way.”

Burns points to disasters that have befallen citrus country in the past — at least 19 hurricanes of Category 3 intensity or greater between 1921 and 2005; nine severe freezes between 1917 and 1989; seven outbreaks of the Mediterranean fruit fly from 1929 to 2010; and three outbreaks of citrus canker between 1912 and 1995.

Each time, the industry bounced back, with UF/IFAS Extension providing science-based information and practical advice. Citrus greening can be beaten the same way, she says.

“We're pursuing every potential solution and getting new information to growers as fast as possible,” Burns said. “We'll continue to make greening our top priority, while maintaining programs that address other threats to citrus health, including emerging diseases such as citrus black spot.”

## EFFORTS AGAINST GREENING

For this exclusive *Citrus Industry* article, Burns offered some thoughts on UF/IFAS Extension efforts against greening in the immediate future:

One of the foremost efforts involving UF/IFAS Extension is the Citrus Health Management Area program, she said. Its goal is to eliminate Asian



Jackie Burns directs the University of Florida's Citrus Research and Education Center in Lake Alfred, one of the world's largest facilities dedicated to a single commodity.

citrus psyllids from entire citrus production areas by coordinating growers' spraying schedules.

Coordination is important because the Asian citrus psyllid will flee from spraying activity if it can, flying to the nearest untouched citrus grove, said Michael Rogers, an entomology associate professor at CREC who leads the program. Launched in 2007, it now includes 48 citrus-producing areas in 22 counties.

“We can't take credit for the basic idea, which came from discussions between the citrus community and representatives of the National Academy of Sciences in 2008,” Burns said. “But when growers came to us and said ‘we really want this,’ Michael Rogers very quickly moved to turn the idea into a reality.”

Another current effort that Burns considers a front-runner in UF/IFAS Extension's fight against greening is the drive to develop electronic tools such as mobile-device applications to help growers schedule spraying, fertilizer application, irrigation and other management activities. UF/IFAS faculty members including Megan Dewdney, Kelly Morgan, Arnold Schumann and Gene Albrigo are involved.

By embracing new technology, Burns said, citrus experts are demonstrating a fundamental strength of UF/IFAS Extension — translating research advances into practical information for producers and the public.

As examples, she cites an information sheet Rogers recently wrote on psyllid control in young citrus trees, and the new citrus-tree nutrient series authored by Mongi Zekri and Tom Obreza available on UF/IFAS'



**Florida Office**  
1611 18th Ave Drive East  
Palmetto, FL 34221

**Office: 941.722.3433**

Call us today for all of your irrigation and fertilizer needs!

## BB Hobbs & Liberty Acres The New Way to Higher Yields!

### • Irrigation - Fertigation Systems

- Conventional
- High Density
- Intensive Management
- Fertigation/Injection

### • Full Service Provider:

- Engineering & Design
- Materials & Equipment
- Installation
- Service

**Sales • Service • Design**

[www.bbhbbs.com](http://www.bbhbbs.com)



# Integration of New Federal Funding Initiatives into CRDF Programs and Goals

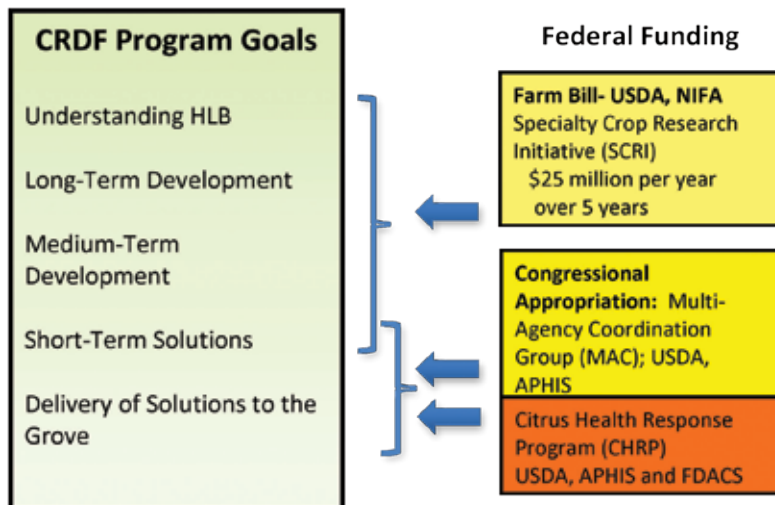


By Harold Browning

With implementation of new federal funding to support research and delivery of solutions for huanglongbing (HLB) in U.S. citrus, there are many questions about how the funding interacts with established programs already underway to meet these needs. At the recent Citrus Expo in Fort Myers, there was a series of brief presentations at the beginning of the educational seminar to update attendees on these programs and their interactions.

The diagram below shows how federal funding through the United States Department of Agriculture (USDA), National Institute of Food and Agriculture Specialty Crop Research Initiative; through USDA, Animal and Plant Health Inspection Service (APHIS) Multi-Agency Coordination Group; and through USDA, APHIS Citrus Health Response Program is being coordinated to complement and accelerate existing programs managed by the Citrus Research and Development Foundation in Florida (green box below) and similarly by the Citrus Research Board in California.

The emergence of substantial additional funding comes at a critical time when Florida crop size has been reduced and thus is providing less research support, and when the need for field evaluation and delivery of solutions has never been greater. The federal programs are well underway, with elected officials, agency representatives and researchers all understanding the need for speed in providing tools to reverse the HLB-induced decline of Florida citrus trees, and to prevent introduction and rapid spread of the disease in other U.S. citrus-producing states.



The roles and responsibilities of CRDF are changing, with greater need to coordinate the multiple opportunities for development and testing of HLB research ideas, as well as moving research results forward to field trial, regulatory consideration where appropriate, and ultimately, commercial adoption. In this changing environment, CRDF continues to provide the leadership necessary to bring all of these efforts together for Florida growers.

*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.*



Column sponsored by the Citrus Research and Development Foundation

Electronic Data Information Source. "This series is the latest in a line of UF/IFAS Extension documents on citrus tree nutrition stretching back to 1954," Burns said.

## ADDITIONAL ADVANCES

Other advances that could soon be aiding growers include:

- Genetic mapping of a new strain of greening bacterium first detected in Brazil and now present in Texas; the mapping should provide clues that lead to improved control methods.
- A new, state-of-the-art greenhouse dedicated to citrus nursery research, located at the Mid-Florida Research and Education Center in Apopka and built with support from the Florida Nursery, Growers and Landscape Association.
- Research results showing that the greening bacterium damages citrus tree roots extensively, a finding that indicates growers can help protect trees by maintaining soil quality and discouraging soilborne pests.
- A just-published laboratory study that suggests a chemical called benzobromarone may be capable of killing the greening bacterium within infected trees; researchers expect to begin field trials in 2014 and caution that success in lab experiments is no guarantee of real-world effectiveness.
- UF/IFAS faculty members helped build a website, Tree Fruit Genome Database Resources ([www.tfgdr.org](http://www.tfgdr.org)), containing citrus genome information and other material useful to scientists and growers.
- Large-scale field trials are underway on 16 citrus rootstock varieties with lower infection rates and greater tolerance to greening than existing varieties; rootstocks that perform well may become available to growers three to five years after the trials conclude.

Tom Nordlie works for UF/IFAS Communications. 🍊



Syngenta recently received approval on a 24(c) label for the use of Revus fungicide in non-bearing citrus grown in greenhouses to control *Phytophthora* root rot in Florida.