



# Greatest CREC accomplishments

By Tom Nordlie

**T**hroughout the Citrus Research and Education Center's (CREC) 100-year history, the collective efforts of its faculty and staff have supported Florida citrus growers in myriad ways. During the good times, CREC delivered improvements to increase productivity and cut costs. During the bad times, CREC helped growers overcome diseases, pests, droughts, freezes and other issues.

To choose a short list of CREC's greatest accomplishments, we conferred with the current CREC director, Michael Rogers, and his predecessor, Jackie Burns, who held the position from 2009 through November 2014, when she was promoted to UF/IFAS dean for research. Though interviewed separately, they discussed many of the same achievements.



**The Citrus Research and Education Center has developed numerous disease-resistant rootstocks to improve the industry.**



**Citrus Research and Education Center personnel helped devise the nation's current food-safety program for fruit juices.**

## LONG-TERM ACCOMPLISHMENTS

- Helping growers produce the world's best-tasting citrus fruit
- Dissemination of scientific information to establish a baseline level of technical expertise among growers
- Improved pest management practices
- Establishing strong partnerships between growers and CREC scientists
- Development and refinement of citrus nutrition recommendations
- Expanding commercial utilization of citrus byproducts

## TIME-SPECIFIC ACCOMPLISHMENTS

- Early use of biocontrol, beginning in 1926 with construction of an insectary to raise the ladybeetle *Harmonia dimidiata* to reduce populations of green citrus aphid
- Contributions to the technology needed to produce frozen orange juice concentrate, early 1940s
- Studies showing that supplemental irrigation could boost yields, early 1950s
- Improved degreening procedures that dramatically cut ethylene gas use, 1952
- Determination in 1953 that the burrowing nematode caused spreading decline; development of resistant rootstocks and management practices
- Research on mechanical harvesting begins, 1958
- Establishing a statewide citrus Extension position, 1966
- Recommendation of microirrigation sprinklers beginning in 1981
- Breeding of citrus rootstocks resistant to citrus tristeza virus, late 1990s
- Leadership in developing Hazard Analysis and Critical Control Points food-safety protocols for juice producers in the late 1990s
- Release of more than 30 citrus rootstock and scion varieties that provide new opportunities for Florida growers, including the first HLB-tolerant variety, Sugar Belle®, 2006–present
- Citrus Health Management Areas program for Asian citrus psyllid control and the concept of coordinated pesticide applications on adjacent properties, 2007
- Determination that the early stages of HLB infection damage citrus roots more so than other tree structures, 2014 🍊