



An enduring home for solving citrus challenges

By Jack Payne, jackpayne@ufl.edu, @JackPayneIFAS

Without a long-term home, it's tough to have long-term vision. And with a difficult fruit tree like citrus, you have to play the long game in research.

Jude Grosser and Fred Gmitter realized, soon after they showed up in Lake Alfred in the mid-1980s, that the Citrus Research and Education Center (CREC) was that long-term home.

BUILDING A BREEDING PROGRAM

By then, the University of Florida/Institute of Food and Agricultural Sciences CREC was already nearly 70 years old. Grosser and Gmitter saw it as the foundation on which they could build something. They decided to build a breeding program.

This wasn't what growers were asking for. Fred has a slide in one of his recent presentations that has a hypothetical but representative growers' quote from the time: "We need FEWER varieties, not new ones!"

But Grosser and Gmitter figured

they and their center would be around for decades to come. That meant they'd witness an industry battered by freezes, market swings, diseases and changing consumer preferences. They had the ability back in 1985 to look toward 2017 and the freedom to pursue science with a delayed payoff.

So they had the license — and the audacity — to start building a breeding program from scratch. They had time to slowly amass the tools and facilities that would become the platform for their talent. They also had a calling card for the growers with the letters "CREC" on it. That would foster relationships that gave them access to acreage, feedback on prized traits and the opportunity not just to study, but to serve.

LONGEVITY AND HISTORY

Growers don't wait for field days and invitations. They call. They've got challenges, and CREC has been where

they've been calling for solutions for 100 years.

Gmitter and Grosser are now in the autumn of their careers. That is, unless they turn out to be like Bill Castle, who was the third amigo in the pioneer breeders' trio of the 1980s. Castle continues to show up at CREC and make productive contributions a decade after retirement.

Grosser and Gmitter's careers span almost an exact third of CREC's century-long history now. Their longevity and that of the house of science they live in allows for more than experiment after planned experiment.

Working as they did in a storied home of innovation, time was on their side. They've had decades not just for intentional achievement, but for serendipity to join them at the lab bench.

Take the Sugar Belle, for example. Gmitter developed it primarily because it could be harvested and shipped north just in time for Christmas. But



Fred Gmitter (top) and Jude Grosser have been a part of the Citrus Research and Education Center for over 30 years.

over the years, Gmitter and Co. discovered another valuable trait, one they hadn't expected.

Even when Sugar Belle trees got infected with HLB, they kept producing — and it was good fruit! It's hard to imagine they would have made this discovery if they had moved on to other research centers or if they didn't have a laser focus on citrus for decades.

As long and illustrious as Grosser and Gmitter's careers have been, CREC's is longer. It turns 100 this year. So they know it's a place that's likely to outlast them. That means they have to engage in the science version of estate planning — finding heirs to carry on their work, reinforcing long-term support for citrus breeding, and identifying promising cultivar candidates for future investigation.

Don't worry. Grosser and Gmitter aren't about to hang up their hats. They're having too much fun. As veteran scientists, though, they appreciate the value of history. They inherited a home renowned for being responsive to growers, and they have worked to protect and justify that reputation.

A CAUSE FOR CELEBRATION

It's not often CREC throws a party, especially in the times we're going through now in the industry. On November 29, you're invited to join us for a 100th anniversary celebration. It will be an important day to remind us all of how long CREC has been responding to industry challenges.

We want you there because the event is also about the long relationships CREC scientists have with growers. When Grosser and Gmitter train their successors, they'll get a heavy dose of science. But you can also bet they'll preach and model the service ethic that's driven their work for more than three decades.

CREC will continue to be a citrus solutions center. As Gmitter says, "We don't know how to stop doing this." 🍊

Jack Payne is the University of Florida's senior vice president for agriculture and natural resources and head of UF's Institute of Food and Agricultural Sciences.

Bactericide Use: an Update at Citrus Expo

By Harold Browning



Use of bactericides to reduce disease levels in infected trees continues to be a topic of debate in Florida citrus. Now in the second season of grower use, many growers are continuing to use the three products containing oxytetracycline or streptomycin within their seasonal spray programs.

The Citrus Research and Development Foundation (CRDF), under the supervision of Bactericides Project Manager Stephanie Slinski, is assisting growers in assessing how their programs are performing in this second season. Data summarized from nearly 70 grower field trials in which some form of untreated control plots were included demonstrate that after one year of use, there were positive yield responses at some locations.

The data are noisy, since there is little replication and limited controls, but the presentation at Citrus Expo provided insights for growers to contemplate. Slinski reported that a majority of the grower trials are continuing this season, allowing an assessment at harvest of the cumulative effects of two seasons of use. News from these trials complement the more rigorous trials conducted in recent years in Florida, which also show wide-ranging results after one year.

In registering for attendance at the 2017 Citrus Expo, a number of Florida growers completed a survey to describe their use of bactericides in the 2016-2017 season as well as their activities and plans for the current (2017-2018) season. There were 57 respondents, about half of the number who completed the survey one year ago. The respondents represented over 131,000 acres. As was the case last year, the respondents were distributed across grove sizes, but a larger proportion who responded represented Ridge and Southwest regions. Summaries gathered from this survey include the following:

- ¥ Six respondents did not use bactericides in 2016, and eight reported not using them in 2017.
- ¥ Those who used bactericides reported an average of 3.4 applications in 2016-2017 and projected that they would average 3.6 applications in 2017-2018.
- ¥ Respondents indicated that they were covering 74 percent of their acreage in 2016-2017 and 71 percent in 2017-2018.
- ¥ The majority of those who completed the survey used both active ingredients. The ratio was approximately two oxytetracycline to one streptomycin application.

These results provide insight into what growers are planning this year, and will be helpful as CRDF and its partners begin the process to seek approval for continued use of the bactericides in 2018. Thanks to AgNet Media for its assistance with this survey.

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.



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