

# Finding Answers to Bactericide Questions

By Harold Browning



As I wrote a few months ago, the crisis declaration allowing growers to use three bactericide products provided a dose of good news and optimism to the Florida citrus industry. Now the hard work begins: gathering and interpreting data on how the compounds are working.

In order to learn from the grower use of these products, the Citrus Research and Development Foundation (CRDF) is directly overseeing or monitoring more than 70 field trials across all of Florida's growing regions, where growers have agreed to provide a matching untreated block or sector to compare with their treatment program for the season. The trials involve our major varieties, but are skewed toward Valencias. We are trying to cast as broad a net as possible during this first application period. Data will be collected and compared across all of the tests at the end of the season.

Stephanie Slinski and the CRDF field trial team will be working with the cooperator growers to collect data on: reduction in bacterial titer (PCR); disease index rating to measure changes in overall tree health; pre-harvest fruit drop; and yield at harvest. Many growers are directly participating in this process by collecting the data themselves.

Following harvest in the fall/winter, the data can be assembled to highlight results of the season-long program that are evident after one season across the varying treatment programs (how many treatments and which materials), regions of the state, varieties and even tree-age classes. Young blocks receiving treatments with bactericides also are being monitored to determine if the program will delay infection or onset of symptoms. We've tried to make the process as simple as possible for participating growers. You can find the instructions at <http://bit.ly/1PQEPGT> for grower field trials.

Results from this first season of use, along with data continuing to come from research field trials, will provide more information to guide grower use in the next season. Right now, we clearly have more questions than answers, and the first use of these materials has been almost overwhelming to growers. But we will get there.

Important questions are being asked, such as:

- What are the most effective adjuvants?
- How are the bactericides absorbed by the plant, through the surface or stomata?
- How long does the material remain active on the leaf surface?
- Do oxytetracycline and streptomycin move systemically once absorbed into leaves?
- What can and cannot be tank-mixed with oxytetracycline and streptomycin?
- What is the most effective rate and volume to apply?
- What are the effects of bactericide treatment on the psyllid?

We have precious little information at this point, and I can understand grower frustration at not having this information. CRDF is working to provide answers to these questions.

Growers need to keep in mind that while we wait on the final Section 18 decision by EPA, it is essential to carefully follow the guidelines spelled out in Commissioner Putnam's declaration letter when using the bactericides. Go to <http://files.ctctcdn.com/168a5f59201/e7bd14cf-0a3a-4f5c-9d3d-66ac12574bbc.pdf> to view the letter.

*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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