

OTC Observations

By Rick Dantzler, CRDF chief operating officer



On Feb. 27, the Citrus Research and Development Foundation (CRDF) held a research strategy discussion with leaders from citrus organizations, CRDF research committee members and other growers. CRDF laid out its research strategy, which is to find ways to maximize the efficacy of injecting oxytetracycline (OTC), find replacements for it if that should become necessary, and develop a sufficiently greening tolerant or even resistant tree. While there was general agreement on this strategy, we must be honest about what we are seeing with injecting OTC since there is so much riding on it.

Nearly all growers are seeing an improvement in tree canopy and apparent health, but this hasn't been true for everyone. It is why we must keep in mind an analogy shared by Morgan Porter, CRDF president, at the research strategy meeting. She said, and I'm paraphrasing, "If four of us joined the gym tomorrow and started working out together, in a year we would not all look the same because we weren't starting from the same place." Her point, of course, was that not all groves started from the same place when they received trunk-injection therapy, so not all grower experiences would be the same.

Here are a few observations from CRDF-funded trials and grower observations. I'm calling them observations and not conclusions because they are drawn from limited replicated data.

1. Hamlins do not seem to respond as well as Valencias.
2. Splitting the dose into two injections on opposite sides of the trunk seems to work better than injecting the same dose on only one side of the trunk, especially in older trees. This makes sense because the side of the tree that receives the injection often looks better than the side that doesn't when only one injection is used.
3. The month in which injections are performed can affect tree response, but the details still need to be worked out.
4. Uptake on colder days or in drought conditions is slower than on warmer days or periods of good rainfall. Whether this matters, though, we don't yet know.
5. OTC can't be used in the third year after two consecutive years of injection, so during the "off" year it is especially important to treat for psyllids.
6. In most cases, trunk damage from the injection is not concerning.
7. While younger trees of fruit-bearing age respond better than older trees, even older trees can be made more productive.
8. Variations in rootstocks are appearing in some trials.

The jury is still out on these observations, but nearly all indicators show that this therapy is working. CRDF is also focused on how best to handle the off year because now that we have a therapy that is working, the last thing we need is for trees to backslide. Consequently, we plan to fund trials to inject trees that have received two straight years of OTC with other compounds or molecules during the off year, as well as inject trees a third straight year with OTC to determine if backsliding occurs.



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