

# Reasons for Hope

By Rick Dantzler, CRDF chief operating officer



As hard as things have been in the last few years, growers occasionally ask me why they should stay in the citrus business. I don't try to talk them into — or out of — anything. After all, I don't know the state of their financial affairs or family dynamics. Instead, I simply tell them reasons I see for being hopeful, some of which I will cover in this column.

First, the restriction on using oxytetracycline (OTC) for three years in a row has been lifted, which eliminates the chance of backsliding during the “off year.” This is huge because we know from statewide root surveys that the use of OTC is restoring root growth, and growers have seen with their own eyes how leaf canopy is being restored. With increased root and leaf growth, there is no reason to believe that trees will not begin bearing more fruit. And more is being learned every day about how to increase the efficacy of this therapy.

Researchers are demonstrating how to use gibberellic acid to delay the maturing and coloring of fruit, reduce drop and tighten bloom windows. Another way of reducing drop — by the application of 2,4-D — is of potentially greater assistance. It's tricky, but it works. The Citrus Research and Development Foundation (CRDF) is working with manufacturers to change the label to allow its use in ways that are friendlier to citrus production.

Swadeshmukul Santra, University of Central Florida professor, presented findings to the CRDF board in July on how novel zinc products have increased auxin levels. This has increased fruit retention more than the use of the grower standard, zinc sulfate.

Fernando Alferéz, University of Florida associate professor, presented findings at the same meeting on how the use of brassinosteroids continues to stimulate growth of young trees when individual protective covers are removed, as well as repelling psyllids and rust mites. In mature trees, the strategic use of brassinosteroids increases Brix in fruit just before harvest.

We know by now that nutrition alone cannot conquer HLB, but nutrition advancements and soil rehabilitation practices can help maintain greening-infected trees once they reset back to profitable levels with other therapies. New products are brought to CRDF's attention frequently. While I view them with appropriate skepticism, many seem biologically sound, so I believe there will be new products to help with tree fertility.

Finally, I have seen new germplasm created by the breeders we fund that seem more tolerant than what we are using. Without validation, however, growers will not go all in on them. Therefore, CRDF is trying hard to provide the resources to create the proof that growers need. And with advancements in gene editing, a resistant tree — one that is totally unaffected by HLB — seems right around the corner. It is possible that trees that may be what we are looking for are already in the ground, but validation and regulatory approval will take time.

CRDF is funding work on all the advancements mentioned above. These and other developments make me bullish on the industry's future.



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