

OTC Is a Priority



By Rick Dantzer, CRDF chief operating officer

Delivering oxytetracycline (OTC) through systemic delivery devices has brought hope for higher fruit yields and better quality, so the Citrus Research and Development Foundation (CRDF) is working hard to maximize the efficacy of this therapy. In just the last two months, CRDF has funded eight projects on OTC and is considering seven preproposals that test other antimicrobials used in conjunction with OTC.

For example, one project measures the impact on the Asian citrus psyllid (ACP) from feeding on trees that have been treated in such a manner. Our hope is that the ACP will ingest enough OTC that it kills the *Candidatus Liberibacter asiaticus* (CLAs) in its gut, preventing the spread of CLAs to other trees when the ACP feeds on them. Wouldn't it be something if fewer trees became infected over time because fewer psyllids were "hot?"

A second project tests ReMedium TI at lower than the recommended doses, as well as one experiment that tests the product at 150% of the recommended dose every other year. If we could get the need for treatment down to every other year while still staying beneath federal residue thresholds, it would cut the cost of the treatment in half, which would be huge.

On other subjects, CRDF funded the next two years of yield and tree health data from an HLB Multi-Agency Coordination Group rootstock and grapefruit trial on the East Coast that had run out of money. The trees had reached fruiting age, so it didn't make sense not to get production data.

With leftover funds, CRDF approved giving the Citrus Research and Field Trial Foundation \$750,000 to jumpstart the new iteration of the program. This will help growers get OTC in mature trees and test other therapies on a large scale.

CRDF also agreed to fund more testing of the finger lime peptide if the testing takes place in Florida. The environment here is different, and we felt that we needed to see evidence of it working here before putting more money into it.

Finally, we invited Ron Brlansky, a University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) professor emeritus, to give us a full proposal on the cause of blight and its triggers. We know that HLB is our primary threat, but a combination of HLB and blight ends the tree's productive life even sooner. Brlansky has made good progress on isolating the cause and triggers.

CRDF is also focusing on next steps for plant improvement since most agree this is the long-term answer to HLB. John Chater of UF/IFAS and Matthew Mattia of the U.S. Department of Agriculture's Agricultural Research Service have recently inventoried all field trials in Florida and are working with citrus breeders to identify the best germplasm for further evaluation. More on this later, but the next steps on plant breeding, especially CRISPR and GMO editing, will surely be a focus for CRDF as OTC and other therapies buy us time to develop a sufficiently HLB-tolerant or -resistant tree.



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