

# Making the Most Impact

By Rick Dantzler, CRDF chief operating officer



July 1 is the first day of the Citrus Research and Development Foundation's (CRDF) fiscal year, so we have been spending a lot of time on our budget.

We are grateful to growers and the Florida Legislature for funding support. With production down, box tax revenues for research are down. So, like growers, we are having to do more with less. Legislative funding has been critical.

As we head into the new fiscal year, we have 42 research projects under contract. Of these, many will end during the next 12 months. What should take their places? Stated another way, what is the research space that CRDF should occupy?

First, an editorial comment from me, not my board: I believe those of us with agencies or governmental entities must be about rebuilding the industry with our funds. It's why CRDF gave the Citrus Research and Field Trial Foundation (CRAFT) \$1.2 million in uncommitted research funds recently. Unless we help growers get new trees in the ground and find ways to heal older sick trees, everything else we do may prove to be purely academic. With that paradigm in mind, here's a research space I see for CRDF.

CRDF can help provide tools for growers to hang on until a sufficiently greening-tolerant or -resistant tree arrives. The most likely tool is injecting antimicrobials to be used in conjunction with or in place of oxytetracycline (OTC). OTC as a therapy will likely have a limited shelf life, so something must take its place if the tree we are looking for hasn't arrived. While growers are increasing production and fruit quality with other therapies, nothing is as final as killing CLAs, and that's what antimicrobials do. We have waited a long time for an effective antimicrobial and a means of getting it into the phloem. Now that we have this, CRDF will help find other antimicrobials and improve their efficacy.

CRDF can help fund CRISPR and the genetic engineering of trees to get HLB behind us. While I believe it would be imprudent to abandon conventional plant breeding entirely, it is time for us to turn more of our attention to CRISPR and genetically engineered trees. I wish that were not the case, but I'm afraid it is.

CRDF committees can evaluate germplasm in the plant breeding pipeline and turn those with sufficient resumes over to the Florida Department of Citrus for mass propagation.

CRDF can take on select non-HLB related topics, like diaspores.

CRDF and CRAFT are developing a synergistic relationship. CRDF will fund basic research, novel ideas and projects that require a level of scientific involvement beyond what growers are able or willing to put in, and CRAFT will test these therapies and products on a large scale.

There you have it. Developing antimicrobials and the trees of the future, taking on select non-HLB topics like diaspores, and continuing the synergy with CRAFT are research spaces I see for CRDF. It's an agenda that is limited compared to what CRDF has done in the past, but it is where I believe we can be the most impactful for growers.

