



GROWER RESEARCH REPORT

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Gamechangers

Rick Dantzler, COO of CRDF

In its document entitled Pathway to a Sustainable Florida Citrus Industry, CRDF outlines the research path it is pursuing. The research proposed can be broadly organized into two categories: projects that can bring growers incremental benefit and those that could be gamechangers. Examples of projects that could bring incremental benefits are new ways of using 2,4-D and gibberellic acid, alone and in combination with the other, peptides, novel zinc products, and brassinosteroids. Gamechangers are advancements that, if successful, have the potential to bring us back to pre-HLB production levels with a corresponding increase in fruit quality. Examples of gamechangers are genetically modified trees that are HLB tolerant or perhaps even resistant, CRISPR edited trees that switch off the genes that allow HLB to do its damage, citrus tristeza virus vectoring which gets liberibacter killing agents into the phloem where liberibacter resides, and injecting oxytetracycline (OTC). It is this last tool – injecting OTC – that I wish to address in this column.

I believe injecting OTC will work. Novel formulations have increased uptake, injection devices are becoming more precise and less expensive, and the labor costs of injecting will become more bearable as production increases and quality improves. Other caretaking costs — like the number of fertilizer applications — should come down, too. CRDF is funding additional research

with Dr. Ute Albrecht and is assisting companies that will soon be submitting Section 24Cs and Section 3s for state and federal approvals.

Furthermore, I am convinced that injecting OTC properly will result in residual amounts of OTC below federal safety thresholds. OTC works its way through trees quickly, so if the label is followed, there should be no concern among processors in buying the fruit or consumers in consuming it. And from an environmental standpoint, no non-target organisms are hit by the OTC. Unlike with spraying, where non-target organisms are hit, all of what is injected goes directly into the tree.

Reports from growers indicate that spraying OTC has been a mixed bag at best, but doesn't it make sense that injecting will work better? When you received your Covid vaccinations, did you smear it on your arm or inject it? It is the same thing here.

It is my hope that the work outlined in the Pathway document will lead to our industry recovering back to where it was before it began to crash, perhaps in the 2014–2015 timeframe when production was approximately 100 million boxes of fruit. I believe we can sell this much product, so long as we maintain quality, and that would be enough production to hold the infrastructure of our industry together until a tree comes along that is sufficiently HLB-tolerant or even resistant to sustain us in perpetuity.



Box Tax Referendum

As I type this, growers are voting on whether to preserve the mechanism for self-assessment to support research. As a 501c(3) not-for-profit corporation, CRDF is not allowed to lobby but it is allowed to educate, and there are several things growers should know.

CRDF does not assess the box tax. By Florida law, CRDF serves in an advisory capacity to the Florida Department of Agriculture and Consumer Services (FDACS). CRDF's role is purely advisory; FDACS is not compelled to follow CRDF's recommendation. A "yes" vote on the referendum is not a vote for a three-penny tax, but only to preserve the mechanism for self-assessment.

Regarding the recommended rate (up to three cents per box), CRDF meets every year in June as the Advisory Committee to decide what rate - if any - to recommend to FDACS for the upcoming year. It is not required to recommend three cents of tax. Since CRDF is an organization created to serve Florida citrus growers and that is controlled by Florida citrus growers, it will recommend what it believes the industry desires. The meeting in June is a public meeting and growers are encouraged to attend and express their opin-

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BLACKSPOT

CRDF recently attended a meeting with growers, regulators, and researchers regarding the blackspot program in Southwest Florida. This has been a terribly frustrating issue because the program does not seem to be anchored in science.

It is my sense that progress in finding a compromise that helps Florida growers without hurting those who export to Europe was made, especially in the afternoon session between the scientists and regulators. CRDF will stay on this and do what it can to make sure the program is based on accurate science.

RECENT RESEARCH PROPOSAL FUNDING DECISIONS

The final year of work on Dr. Lauren Diepenbrock's mealybug project was approved. It was not without a vigorous debate in the Research Management Committee and with the board. As one of our committee members said, our "hair is on fire" and it's hard to spend money on something other than HLB right now, but we were able to reach a compromise with Dr. Diepenbrock on the funding required so the board decided it made sense to accept the compromise and finish out the work because there are many growers dealing with mealybug problems. Of particular interest in this project is what Dr. Diepenbrock is learning on predation.

Also approved were two projects funded by our new "directed research" way of considering projects. With directed research, the research question is defined and CRDF finds researchers who can do the work. The benefit of this is speed and usually lower cost. It contrasts with the typical Request for Proposals (RFPs) where a general research need is identified and published, and proposals are accepted from all credentialed researchers. Here, staff had identified novel zinc products and advancements in work with brassinosteroids as ways to increase yield and fruit quality, so we worked with researchers who we knew could do the work and brought those projects forward. The Research Management Committee made a few tweaks but voted to recommend the projects and the board ratified those recommendations.

Two projects recommended by RMC were deferred. One had to do with studies on products containing gibberellic acid, 2,4-D and cytokinin. The board thought we needed more information from the researcher before deciding. The second project was a series of field trials involving injecting oxytetracycline. CRDF has already funded Dr. Ute Albrecht to test OTC formulations and injection devices that have the potential to hit the marketplace, and the companies have their own research underway to support their registration efforts, so it was not clear to us what this research would add. We did not kill the proposal but deferred it to see if a more productive role for our research dollars presented itself.

UPCOMING EDUCATIONAL SESSION Florida Citrus Mutual serves growers in many ways, including presenting the annual Florida Citrus Conference in Bonita Springs. CRDF is pleased to host the Educational Session, and this year we will be featuring a good mix of public and private sector research as we seek to provide growers with the latest information on how to maximize production in this very difficult industry environment. The session runs from 8:00 a.m. to noon on June 16th. I hope to see you there!

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ions regarding what CRDF should recommend. The rate has not always been three pennies and it does not have to be that going forward.

Ten of thirteen CRDF board members are Florida citrus growers. Thirteen of the seventeen members of the Research Management Committee - the primary research committee of CRDF - are Florida growers. Growers on our board and committees have been hurt by HLB just as all other growers in the industry. These growers have the same interest in research projects that provide helpful results as all other growers. We also subject all proposals to peer review by scientists from across the country to try to make good funding solutions. We wish as much as anyone that HLB was

behind us, but it has not been for a lack of effort.

When thinking through the wisdom of having the mechanism for self-assessment in place, those who represent citrus interests in Tallahassee would tell you that it makes a difference to legislators and members of Congress when making funding decisions that growers have "skin in the game." Also, I know it seems hard to imagine now, but there will be a time when HLB is eradicated or made functionally irrelevant and there will be other research needs for an industry as large and dynamic as the Florida citrus industry. If the mechanism for self-assessment is eliminated, what is the realistic possibility that it or anything like it would ever be approved again?