

Synopsis of Ongoing Field Trials of HLB Solutions and Other Tools for Disease Management



By *Harold Browning*

With fruit harvest season arriving, field trials that have been underway during the growing season are winding down and the harvest data will be collected over the next several months. CRDF has focused over the past several years on moving research results to field trials, and many of these trials necessarily bridge multiple seasons. Treatments target rates of spread of *Candidatus Liberibacter asiaticus* (CLAS) via Asian citrus psyllid (ACP) control, tree growth response to nutritional treatments, or growth response to treatments targeting CLAs titer reduction. In addition, field trials are investigating how soil and/or water conditions may impact disease progression or tree response. This summary lists some of the ongoing field trials supported by CRDF that are being evaluated as harvest approaches:

- ❖ Evaluation of season-long ACP population management with pesticide materials, rates, and application methods
- ❖ Evaluation of efficacy of antimicrobial treatments for reduction of CLAs population and measure phytotoxicity
- ❖ Measurement of commercial microbe product applications on tree health and productivity
- ❖ Determine the effects of thermal treatment of HLB-affected trees on growth response and CLAs titer reduction
- ❖ Evaluation of candidate HLB-tolerant rootstocks in replicated field trials
- ❖ Testing the ability of single full-dose or multiple low-dose applications of plant growth regulators to reduce pre-harvest fruit drop
- ❖ Integrating ACP management, high planting densities, and irrigation/nutrition strategies into new citrus plantings
- ❖ Treatments to adjust bicarbonates and/or pH imbalances in soil and irrigation water
- ❖ Large-scale demonstration of citrus leafminer disruption through pheromone technology

Many of these field trials will continue into the 2015 season to evaluate cumulative effects of treatments. Harvest information this season will allow evaluation of the season-long value of treatments and connect tree response to productivity and fruit quality.

Many citrus growers participate as cooperators in these various field trials and are acknowledged here for the contributions they are making in hosting field experiments. The placement of these field trials across the citrus regions of Florida assists in determining regional differences in response to the treatments being tested.

Additional information on CRDF research and delivery projects can be found at citrusrdf.org

Harold Browning is Chief Operations Officer of CRDF. The foundation is charged with funding citrus research and getting the results of that research to use in the grove.



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