

Impacts of Hurricane Irma on HLB Field Research



By Harold Browning

The effects of Hurricane Irma in early September on the Florida citrus industry were obvious and immediate. Serious loss of this year's fruit crop, tree damage and standing water in groves were experienced. Every effort must be made to address these impacts on Florida citrus growers.

The hurricane winds and rain also impacted the broad, ongoing HLB field research on grower farms and at research facilities in Florida. While the direct loss to growers deserves the greater attention, the Citrus Research and Development Foundation (CRDF) has focused its efforts on determining the effects of Irma on a wide range of field trials across the state. Other research institutions are taking similar steps.

Like growers, the research community prepared for Hurricane Irma to the extent possible. At risk were field experiments, research greenhouses and other structures, and laboratory experiments for which power failure would mean lost progress. In the case of field research, CRDF scheduled visits to field trials in the week preceding the hurricane to ensure that any data that could be collected in advance was obtained. This included HLB-related fruit drop, tree health index and other measurements. These data points may prove valuable as we assess the results from this year's work, knowing that it will be difficult to collect subsequent data this year due to Irma's impacts.

Following the hurricane's passing, the CRDF team visited field sites and communicated directly with grower cooperators on the status of specific field trial locations, seeking information to determine the impact on the trials and the next steps. Similarly, project managers contacted the investigators with University of Florida, U.S. Department of Agriculture's Agricultural Research Service and others to determine the status of field experiments they were conducting with support from CRDF. The CRDF team summarized the resulting information, and assessments of immediate and long-term effects on individual research trials were made. An important aspect of this effort was to prioritize how to best deploy resources through fall and winter in field trials across the state, collecting data where it makes most sense.

Citrus tree defoliation, fruit loss and tree damage make completing yield and other assessments for the 2017–18 season difficult. However, with properly designed and replicated studies, much can be learned by completing data collection where possible. Adjustments will be required for uneven fruit loss distribution within trial blocks. On the other hand, new data may be generated on how various treatments within a replicated trial affected tree response to the strong winds and water. Observation of regrowth and recovery in 2018 will illustrate how various HLB management strategies held up to the insult of high winds and heavy rains.

While this season's data were compromised, virtually all trials are in a condition to continue in 2018. CRDF will monitor the status of grove recovery with an eye to continue vital field research efforts in Florida, and to make adjustments as necessary.

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.

