Challenges to replanting citrus groves addressed by CRDF



By Harold Browning

There is mixed enthusiasm in Florida for replanting groves that have suffered debilitating losses from canker and HLB. Methods must be developed and field-tested to protect young trees during the first five to six years following planting, when they are most vulnerable to infection by the HLB bacterium carried by Asian citrus psyllid (ACP). At the same time, horticultural practices must be enhanced to provide for early productivity and yield quality so that groves will provide financial return before being impacted by disease infection.

Research is addressing ACP in mature citrus trees, and some degree of success can be attained through vigilant scouting and application of pesticides. Additional benefit has been derived through cooperation among growers via the Citrus Health Management Areas (CHMAs). Despite these efforts and long-term research to develop disease-resistant plants, we do not have tools available today to fully protect young citrus trees from disease infection, particularly from HLB.

A number of innovative and optimistic citrus growers have undertaken new citrus plantings in the past five years, prepared to incorporate all available tools to be successful in getting trees to productive age. These plantings begin with clean nursery stock and are utilizing intensive practices of fertilization, pest and disease scouting, pesticidal applications, and aggressively roguing infected trees as soon as they are identified. These innovators have adopted all available information and technology, but many are faced with increasing infection levels as young trees grow through the first five years. Panel discussions at recent citrus educational events highlight experiences of growers who are replanting, and convey uncertainty about success in the face of increasing HLB presence.

Research supported by the industry through CRDF is addressing several areas that are vital to success with new plantings, and results are forthcoming in the following areas:

• Expand the availability of soil-applied insecticides to provide season-long psyllid control as trees progress from planting through the most vulnerable stages of growth in years 1-6. The CRDF Commercial Product Development Committee is leading an effort to expand labels for effective materials to allow for increased control as trees advance to produce fruit in years 3-6.

• Improve monitoring for ACP and HLB, including new diagnostics that will locate early infection and allow inoculum management in new plantings.

• Develop psyllid management in young plantings that incorporates attractants, repellents, and other tools complementary to insecticidal suppression.

• Continue to foster expansion of CHMAs to optimize psyllid control across broader areas.

• Evaluate alternative citrus production systems that promise to shorten time to productive yield in new plantings with higher density and intensive irrigation/ fertigation practices.

• Manage HLB and other stresses within the context of overall citrus production, focusing on maintenance of long-term health and productivity of the trees.

Florida citrus growers are battling HLB, and many are delaying replanting activities until proven methods emerge that will protect young trees. Improved ability to plant resets and new plantings will significantly restore confidence in the citrus industry to overcome the HLB impacts and to look forward to renewing the production levels necessary to sustain the industry. Ongoing progress with these and other HLB research areas is provided by individual project leaders at frequent grower meetings and Extension events and can be found at our website www.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.



Column sponsored by the Citrus Research and Development Foundation