

Citrus Growers Attend HLB Thermal Therapy Field Day April 30

By Harold Browning



A field day on April 30 in the Indian River citrus growing area of Florida demonstrated ongoing work to evaluate the value of applied heat in treating trees affected by huanglongbing (HLB). More than 175 growers and other interested parties participated in this day-long event organized by Parker Platts, Multi-County Extension Agent, Fruit Crops, and sponsored by CRDF. The field day highlighted research that is evaluating use of tree covers to trap solar heat and several methods that are being developed to speed up the process of treating trees by application of supplemental heat.

The event was hosted by the U.S. Department of Agriculture/Agricultural Research Service (USDA, ARS) at its U.S. Horticultural Research Laboratory in Fort Pierce, and included opening presentation overviews, a visit to the ARS research farm to see application methods and to view trees which had previously been treated with heat, and to a grower site where thermal therapy has been used for nearly three years. The challenge is to provide adequate temperature and duration conditions to reduce the titer of *Candidatus Liberibacter asiaticus* bacteria — the causal agent for HLB — while not causing heat injury to the trees.

Presentations by USDA, ARS and the University of Florida/Institute of Food and Agricultural Science research teams highlighted progress in understanding and delivering thermal therapy, and were followed by observation of the technologies and methods in the field. These demonstrations signified that this HLB tool has moved from the lab to the field and is ready for adoption. Participants had many questions and discussed details of practicality, cost, tree injury, and when during the year such treatments can be expected to be effective. Other topics included impact on fruit quality and the likelihood that heat treatment would actually eliminate the bacteria from infected trees. Many of these questions are being evaluated further as more trees are treated and the methods continue to be refined.

The field day continued with a visit to a grove site of Edsall Groves near Fort Pierce, allowing participants to see evidence of treatment of young trees with solar thermal therapy and the results of trees which had been treated very recently and as far back as two to three years. Designs for the tree covers were discussed and an active discussion occurred between participants and Dave McKenzie, the production manager who has been an advocate and adopter of thermal therapy.

CRDF initiated this field day to inform growers of this emerging tool, and also to attract entrepreneurs, innovators, individuals and companies who are interested in helping to deliver thermal treatment to growers on a broader scale. This is an important step in moving from proof to use, and CRDF is strongly encouraging the partnerships that can make this happen. In addition, with recent federal funding being made available to bring HLB solutions to the field, CRDF and the industry are pursuing the opportunity that exists to partner with the USDA Multiagency Coordinating group to direct some of the federal funding to encourage scale-up of thermal therapy.

More information and the presentation contents can be viewed by going to the thermal therapy page at citrusrdf.org, which highlights the presentations made during the field day, photo galleries from the field visits, and additional information related to thermal therapy and its use in treating HLB-infected trees.

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.

