

January – March 2021

The search for a better trap

In January, the Citrus Pest and Disease Prevention Committee (CPDPC) Operations Subcommittee asked DATOC to review available methods of trapping ACP and recent research on the subject. In March, we presented the results of our review to the Subcommittee. After querying the DATOC expert panel and a review of available literature, we found that there were a few methods which warranted further experimentation in California. Further work on this project has been moved to the Science Subcommittee.

Exploring the effectiveness of the residential control program

Modelling the effectiveness of huanglongbing control

DAOTC has been working with the CPDPC Science Subcommittee to explore how the effectiveness of the residential control program can be evaluated. In February, we presented the results of two projects aimed at answering this question. The first used the agent-based model, built by the epidemiology team at the USDA-ARS lab in Ft. Pierce, FL, to model huanglongbing spread from residential areas of Ventura counties into commercial orchards.

The second project used the Cambridge Modelling interface, developed at Cambridge University, to simulate spread over the greater Southern California region under different management scenarios. Both models indicated that a control program like the one currently utilized in California would slow disease spread.

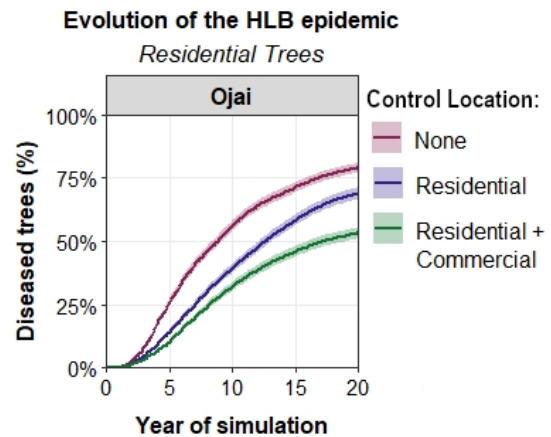


Figure 1. An excerpt of output from the agent-based model.

Classification of climatic suitability

Another part of our support work for the Science Subcommittee has explored the suitability of average maximum and minimum temperatures in different regions for ACP development. After completing this work for California, we were asked to expand our efforts to include Texas, Florida, and Brazil. With collaboration with researchers from Brazil, this request was completed and provided to the subcommittee; a concluding report was not involved as the results are part of an ongoing discussion.

Stakeholder Communication

In March, we received an updated sampling database from CDFA which was processed and added to our monthly updates on the data dashboard at www.datoc.us/data-dashboard. We have also implemented a new weekly update on DATOC's activities, which can be found on the homepage.