

Laurel Wilt—An Update on the Disease’s Impact on South Florida’s Avocado Industry

Jeff Wasielewski^{1*}, Jonathan H. Crane² and Daniel Carrillo²

¹ Miami-Dade County Extension, University of Florida IFAS, Homestead, FL

² Tropical Research and Education Center, University of Florida IFAS, Homestead, FL

Corresponding author: jwasielewski@ufl.edu

(Please list each author and department as they should be listed in order of authorship. Use the same number for authors from the same location. Please indicate the presenting author with an asterisk. Indicate the corresponding author following the example above.)

Laurel wilt is disease that affects plants in the *Lauraceae* causing a tree’s xylem to shut down followed by rapid wilt and sudden death. It is caused by the fungus, *Raffaelea lauricola*, that was introduced, along with its original vector, the redbay ambrosia beetle, *Xyleborus glabratus*, to the United States in May of 2002 in Port Wentworth, Georgia. *Raffaelea lauricola* has now moved south from Georgia through Florida and as far west as Texas decimating over a half a billion native Lauraceae plants. *Xyleborus glabratus* was first detected in South Florida in 2010, and the first tree infected with *Raffaelea lauricola* found in an avocado grove in 2012. While *Xyleborus glabratus* is the primary vector for native Lauraceae, other ambrosia beetle species have picked up *Raffaelea lauricola* and are thought to be the main vectors of *Raffaelea lauricola* within avocado groves. Roughly 2% of the 7,000 acres of avocado groves in South Florida have been destroyed due to this disease, and there is no known cure. Current recommendations at minimum include excellent horticulture, vigilant grove scouting, and immediate removal and destruction of infected trees. Other techniques being used to combat this disease are, detector dogs, fungicide injection and infusion, and root trenching and ambrosia beetle suppression.