

# Laurel Wilt / Redbay Ambrosia Beetle Detection Update



March 2010

**Laurel wilt is a deadly disease of red bay (*Persea borbonia*) and other tree species in the Laurel family (*Lauraceae*), including the avocado tree (*Persea americana*). The disease is caused by a fungus (*Raffaelea lauricola*) that is introduced into host trees by a non-native insect, the redbay ambrosia beetle (*Xyleborus glabratus*). The disease was likely introduced into the US on infested wood packing material.**

## **History of Laurel Wilt and Redbay Ambrosia Beetle Complex**

- 2002 – Redbay ambrosia beetle first detected in Georgia
- 2004 – Laurel wilt disease found in eastern US
- 2005 – Laurel wilt found on red bay trees in Duval County
- 2007 – Laurel wilt found on avocados in Duval and Brevard counties
- 2008 – Laurel wilt found on avocados in Malabar, Brevard County
- 2009 – Laurel wilt suspect samples collected from commercial avocado trees in Homestead (as of February 22, 2010, no laurel wilt has been confirmed in Homestead or any other commercial grove)
- 2010 – Redbay ambrosia beetle detected in a residential area of west central Miami-Dade County

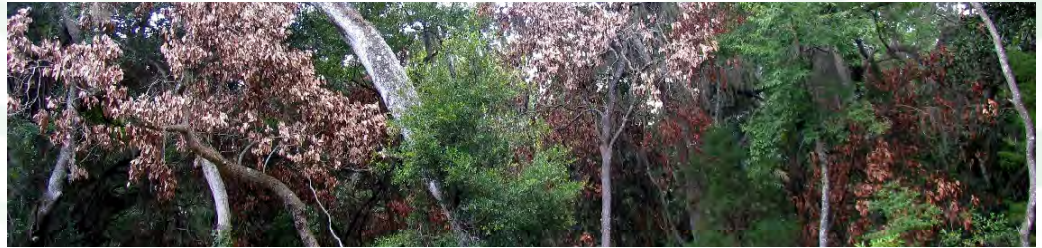
## **Tracking Disease Spread**

DPI and USDA have been surveying for LW/RBAB since 2002 when the beetle was identified in the US – once avocado determined to be a likely host, all efforts ramped up

- 2002 – Insect/disease complex has been on the department's radar since RBAB found in US. Have been asking questions, holding inter-agency meetings
- 2003 – Trapping efforts underway
- 2006 – Have been providing information to industry through the Avocado Administrative Committee on trapping efforts and regulatory status

## **Laurel Wilt Working Group**

- 2009 – In response to the serious implications of laurel wilt to the avocado industry, the Commissioner initiated the Laurel Wilt Working Group – purpose of group is to assemble research, regulatory and industry expertise to review current status and chart an effective management strategy to mitigate potential impacts. Three sub-groups are working on:
  - Research
  - Regulatory
  - Outreach
- Face-to-face meetings held (July, September, November)
- Conference calls held on regular basis (monthly and more frequently as needed)
- Sub-groups hold separate conference calls and face-to-face meetings



### **LW/RBAB Research Symposium – November 3, 2009**

The purpose of the research symposium was to bring together experts in RBAB and LW to make presentations on the known science and recent research findings on the laurel wilt disease and redbay ambrosia beetle complex to those interested in protecting the important avocado industry in Florida. In the afternoon session, the researchers and attendees were asked to participate in a dialogue to better delineate how the ongoing research will benefit the avocado industry, determine what research needs to be pursued and identify mechanisms or strategies to assist in achieving successful research outcomes.

- Research symposium held on November 3, 2009 in Homestead
- Over 75 attendees from around the country
- Presenters included experts in the field from FDACS/DPI, USDA, Forestry, UF Tropical Research and Education Center, and others
- Summary of symposium discussions and action items are posted on DPI's website

### **Expanded Trapping Efforts**

- 2009 – With the southward movement of the redbay ambrosia beetle, trapping efforts were intensified in July in the Homestead area (90% of commercial groves inspected in next several weeks with no positive finds)
- 23 traps in 7 counties (found in avocado groves, parks and residential areas)
- Additional traps were placed in the immediate area of the Miami-Dade RBAB find
- Additional efforts underway to expand redbay ambrosia beetle survey by placing 100 traps on the border and in the Miami-Dade avocado production area

### **Outreach Efforts**

- Maintain website/post maps
- [saveTheGuac.com](http://saveTheGuac.com) outreach campaign (bumper stickers promoting special website – YouTube)
- LW/RBAB video being widely distributed
- Presentations to local governments, civic organizations, industry groups, schools and state parks
- Laurel Wilt in Florida video ([www.fl-dpi.com/videos.html](http://www.fl-dpi.com/videos.html))

### **Next Steps**

- Compile status and needs for pesticide labels
- Construct matrix of ongoing research projects with expectation of results - short, medium, long
- Develop a review of aerial capabilities for survey and detection
- Evaluate survey results
- Refine diagnostic protocols
- Cooperate with research activities
- Determine appropriate regulatory response