Laurel Wilt  

Laurel wilt (LW) is a disease complex that has spread rapidly across the southeast coastal plain and has already killed hundreds of millions of trees. LW occurs when a tiny redbay ambrosia beetle (RAB) introduces spores from the pathogen, *Raffaelea lauricola*, to a host. The spores grow in the beetle galleries and the beetles and their offspring feed on the fungus. As the fungus grows, it plugs up the vascular system which causes rapid wilting, foliar discoloration, and death.

LW can spread to new locations if infested wood is moved and research now suggests that a single female RAB is capable of starting a colony in a new location.

Currently, there is no cure for LW, so the disease will continue to spread into the northern range of its hosts.

**Hosts**

LW affects plants in the laurel family including several economically and ecologically important hosts. Redbay (A) has been the most widely affected species with 320+ million trees killed to date. Other hosts include avocado (*Persea americana*), sassafras (*Sassafras albidum*), pondberry (*Lindera melissifolia*), and pondspice (*Litsea aestivalis*).

**Symptoms**

- wilted (C) green foliage
- leaf discoloration from reddish to purplish to brown; occasional chlorosis (D)
- evergreen hosts retain dead leaves for 12+ months (B)

**Signs**

Evidence of ambrosia beetle activity in combination with LW symptoms should be investigated. Sawdust toothpicks (E), boring dust on trunks or at tree base (L), and tiny exit holes (F) are signs of ambrosia beetles. Removing the bark on symptomatic host trees may reveal dark streaking on the surface of sapwood caused by the LW fungus (F).

You can help protect U.S. plant resources by monitoring for this pest complex. If you notice signs and symptoms of the disease or insect, please report them!

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SCOUTING GUIDE

Symptoms of laurel wilt vary by species and begin in a portion of the canopy, known also as flagging (D,J), before spreading throughout. Monitor host trees (1 inch or greater in diameter) for wilting and change in leaf color.

Evergreen hosts hold dead foliage for 12+ months (G), but deciduous hosts may drop leaves (J). Symptoms in sassafras are more subtle, so monitor these hosts closely (H).

GET INVOLVED

1. see where it is

Laurel wilt and the redbay ambrosia beetle continue to spread. To see where it has been reported, visit the LW EDDMapS page.

2. monitor and report

Protect susceptible trees and the wildlife that depend on them by monitoring for LW. If you see symptoms that look similar, take a series of quality photos and report it using the FD report form.

3. don’t move wood

Unwanted pests, including RAB and the LW fungus, spread to new locations when infested wood is moved. With LW, it only takes one tiny RAB to start a colony in a new location!

If you use firewood remember: BUY IT WHERE YOU BURN IT!

Learn more firewood tips from our friends at Don’t Move Firewood.

ADDITIONAL RESOURCES

More information, photos and partner links are available on the First Detector LW page.

Download and print a pocket-sized LW scouting card from our pest identification page.

Photos: (B,M) James Johnson, Georgia Forestry Commission, bugwood.org; (C,E,F,G) Albert (Bud) Mayfield, USDA Forest Service, bugwood.org; (D,J,K,L) Mark Hoddle, Center for Invasive Species Research, UC Riverside; (H,I) Chip Bates, Georgia Forestry Commission, bugwood.org.