

**Introduction:**

Laurel wilt is a fungal plant disease of certain trees and shrubs that was first seen in New York State in July 2025. The pathogen (*Harringtonia lauricola*, formerly *Raffaelea lauricola*) can infect only plants in the laurel family (Lauraceae). In New York and the Northeast region, sassafras and spicebush are the trees of concern. A number of plants that have “laurel” in their common names, such as mountain laurel and cherry laurel, are not affected by laurel wilt disease.

In the first half of 2025, the northern boundary of the affected area in the southeast ran from North Carolina through Tennessee, Virginia and to Kentucky. The previous laurel wilt infection site closest to the first confirmed location in New York was ~450 miles away in central North Carolina.

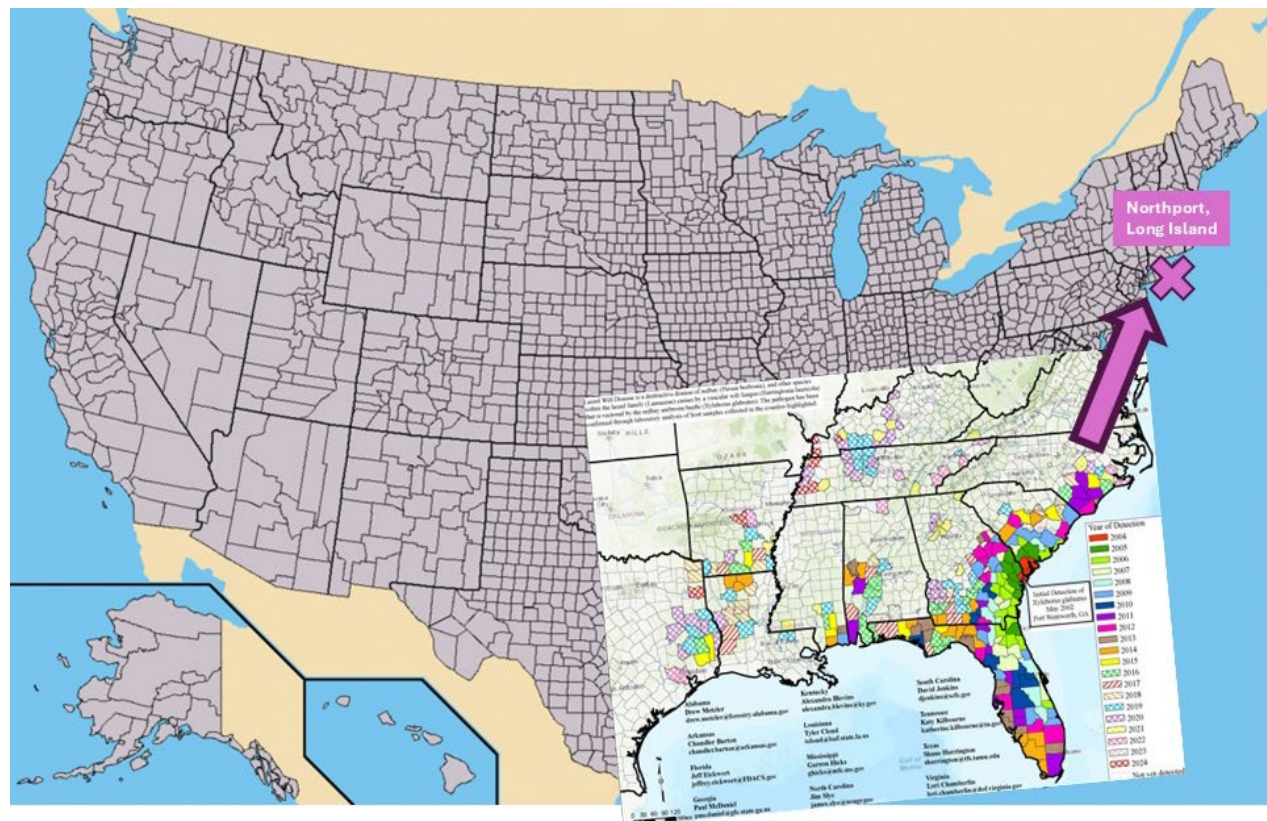


Figure 1: Movement of laurel wilt using Arc GIS Map; USDA Forest Service, Forest Inventory and Analysis Program.

The laurel wilt fungus is carried by a tiny ambrosia beetle. In the south this is most commonly the redbay ambrosia beetle, *Xyleborus glabratus* or RAB. This beetle is just a bit larger than the size of President Lincoln’s eyebrow on a penny (see image below). As it tunnels into the stems of trees, it creates round holes the diameter of a paper clip wire.

How did this fungus and tiny insect move that lengthy distance? Most believe that human activities are to blame, by the moving firewood or nursery stock. Both the beetle and the fungus are introduced species to the United States (originating from Asia) and have caused devastating damage to some native plants in the southern US. RAB and the laurel wilt fungus were first identified in the United States in 2002 in Port Wentworth, near Savannah, Georgia. They most likely entered the country on wood packing material.

### Host Plants:

Just because “laurel” is in a plant name doesn’t mean it is a host (see chart). Early detection is key! When the pathogen is introduced to a new site, it is quickly spread by the beetle and is capable of killing all susceptible trees in the area. with individual trees often killed in just a few weeks or months. Fortunately for us in New York, many of the known host plants do not grow in our cold climate.

Plants that are susceptible (in the Lauraceae):	Plants that ARE NOT susceptible, non- hosts:
*sassafras ( <i>Sassafras albidum</i> )	*mountain laurel ( <i>Kalmia latifolia</i> )
*spicebush ( <i>Lindera benzoin</i> )	*bog or swamp laurel ( <i>Kalmia polifolia</i> )
redbay ( <i>Persea borbonia</i> )	*pig or sheep laurel ( <i>Kalmia angustifolia</i> )
avocado ( <i>Persea americana</i> )	*cherry laurel ( <i>Prunus laurocerasus</i> )
silk bay ( <i>Persea humilis</i> )	*giant laurel ( <i>Rhododendron maximum</i> )
swamp bay ( <i>Persea palustris</i> )	<b>STEP ONE OF A DIAGNOSIS = IDENTIFY THE HOST PLANT</b>
pondspice ( <i>Litsea aestivalis</i> )	
pondberry ( <i>Lindera melissifolia</i> )	
camphor ( <i>Cinnamomum camphora</i> )	
sweet bay ( <i>Laurus nobilis</i> )	
* Trees or shrubs found in NY	

### Key Symptoms and Signs:

- First, leaf wilting and discoloration.
- As disease progresses, leaves senesce, brown and drop, leaving bare branches.
- Beneath the bark, dark streaking of the sapwood occurs in the direction of the wood grain.
- Cut ends will show black dots of discoloration in the sapwood, just beneath the bark.
- In the spring following a previous year’s infection, sassafras may produce stunted leaves.
- Small, round entrance and exit holes, sawdust, or frass tubes left by an ambrosia beetle vector, such as the redbay ambrosia beetle.



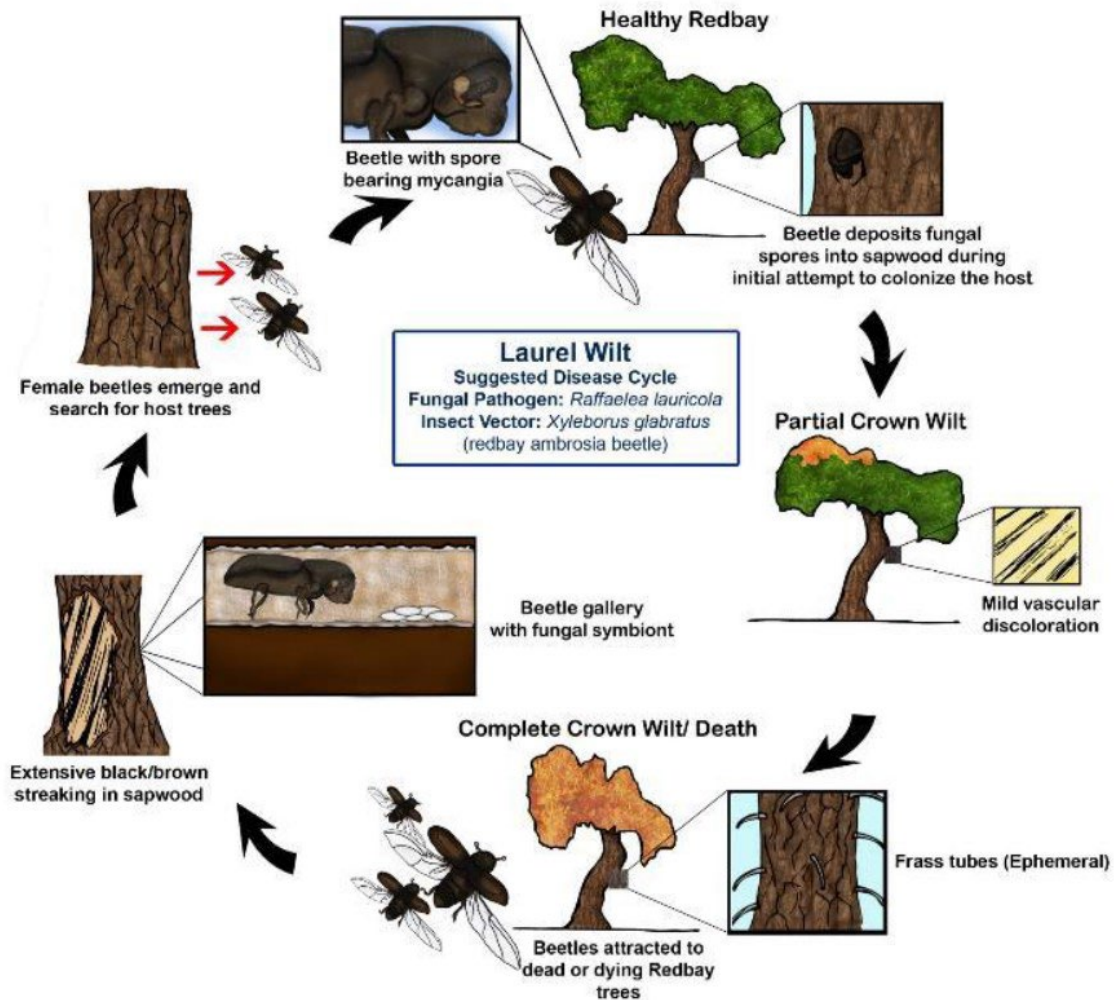
### Disease cycle:

RAB serves as a vector, dispersing the pathogen by depositing the fungal spores in the galleries it creates while feeding. The fungal pathogen grows within the vascular system of the tree and eventually causes plugging of the system, restricting water and nutrients from moving throughout the tree. RAB is associated with laurel wilt in southern US states and only recently found in the area where wilting sassafras trees were seen on Long Island. It is not known whether the fungus and beetle vector were moved in firewood or nursery trees, or whether the vector beetle was blown to New York during strong windstorms.



When trees die, they are often cut down and used for firewood. Those without knowledge of this disease may transport this wood, unknowingly moving the

fungus and beetle to new locations. A better-informed public, aware of these potential problems, should slow the spread of laurel wilt.



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Figure 2: Hughes et al laurel wilt disease cycle, note previous name listed, changed to *Harringtonia lauricola*.

### Management:

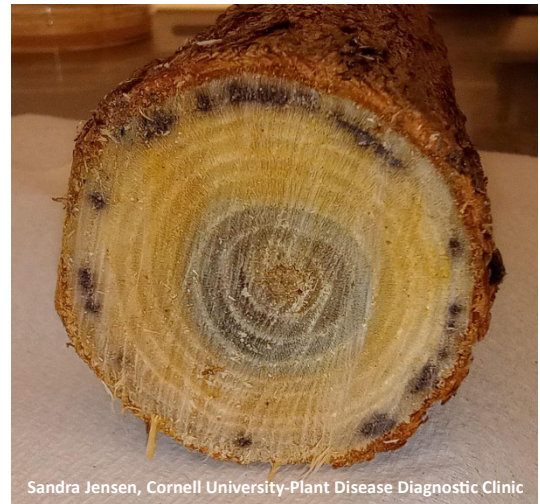
Unfortunately, there are no known cures for an infected tree, so management tactics focus on reducing the rate of spread and minimizing the amount of disease. Sassafras and spicebush are not significant economical forest crops but they add to the diversity of our forests, they provide shelter and food for wildlife, they are used in wood products and crafts, and they have cultural significance for many groups.

- Don't panic and feel you need to get a symptomatic tree out of a yard or site immediately. In most cases, it is best to leave the tree where it is. Cutting it down and transporting it out of the area can lead to contamination of new sites.
- Cutting, chipping and mulching trees or using the wood as firewood on site may be the most appropriate course of action. For safety's sake, get help from a commercial arborist if you decide to fell infected trees.
- The wood or wood chips can be covered with a tarp to prevent insect movement.



### Key Points to Remember:

- Not all “laurels” are susceptible to infection; many trees and shrubs with common names that include ‘laurel’ and ‘bay’ are not hosts, such as mountain laurel, cherry laurel and sweetbay.
- Early detection is key! Consider this a BOLO Alert, meaning **Be On the Look Out** for symptoms and signs of this fungus and/or beetle.
- When the pathogen and vector are introduced to a new area, the fungus is spread by the beetle and the susceptible trees may be killed in just a few months.
- Beetles prefer maturing trees of at least 3” diameter at breast height; typically, young trees are not infected, however, this may not be true in our area as several small trees (< 3” diameter) have been reported with symptoms during initial surveying.
- **DO NOT move firewood!** Movement of firewood is the most likely method for continued spread of this disease!
- If sending images, please take the time to get very clear images of the characteristics, symptoms and signs. Those reviewing the images can’t provide instructions based on blurry images.



### If You See Something, Say Something!

In New York, if you see wilting sassafras or spicebush, you can report it several ways.

- First, take several pictures, ensure the symptoms of concern are seen clearly in each image.
  - Note observations of the damage and if you viewed evidence of the beetle.
  - Describe the site, include the address or GPS coordinates.
  - Indicate that you suspect laurel wilt or another disease.
  - **If the symptoms are on your property and you want to learn if your trees or shrubs are infected with a plant disease**, which may be laurel wilt or another disease or problem, you should contact one of the Cornell University, SIPS, PPPMB diagnostic laboratories.
    - Submit photos to one of the following:
      - The Plant Disease Diagnostic Clinic in Ithaca, NY at [cornell-plantdiseaseclinic@cornell.edu](mailto:cornell-plantdiseaseclinic@cornell.edu)
      - The Long Island Horticultural Research and Extension Center in Riverhead, NY at [mld9@cornell.edu](mailto:mld9@cornell.edu)
  - **If the symptoms are NOT on your property or on your property and you want to report a possible laurel wilt case**, you should contact the NYS Department of Environmental Conservation (NYSDEC).
    - Submit an email notification to NYSDEC using the forest health address at [foresthealth@dec.ny.gov](mailto:foresthealth@dec.ny.gov)
- NYSDEC staff will evaluate the image(s)/text and if a good candidate for analysis, will contact the property owner, or you, to arrange a sample collection.