

How to Collect Suspect Samples of Laurel Wilt Disease

Woody plants in the laurel family (Lauraceae) affected by laurel wilt disease typically have wilted leaves and a black or dark discoloration in the outer sapwood of the main stem or branches (Fig. 1). To confirm presence of the laurel wilt pathogen, this discolored sapwood should be collected for analysis. Evidence of ambrosia beetle attack may or may not be present. The beetle bore holes are tiny (< 1mm, about the diameter of small paper clip wire, easily overlooked). The beetle attacks larger diameter trunks and branches to introduce the pathogen, not twigs.

If you suspect a plant has laurel wilt disease and would like confirmation of the causal pathogen, please follow these steps to submit a plant sample:

- 1. A.** If collecting from the main stem of a mature tree: Using a hatchet, hammer and chisel, or knife, remove the bark down to the surface of the sapwood (xylem) and look for discoloration in the wood. Chisel or cut out a few thick chips of the discolored wood.
B. If collecting from 2-3 inch diameter stems or branches with wilted leaves: With a knife, remove bark down to the surface of the sapwood and look for discoloration in the wood. Cut and collect a few short branch or stem sections that contain this discoloration. Small twigs that have been dead a long time and are dry and crispy when broken are not good samples for pathogen confirmation.
- 2.** Fill out a sheet of paper with information about the sample (type of plant, date collected, exact location of diseased plant, symptoms observed, your name, address and contact information).
- 3.** Put the plant material in a plastic zip-lock bag and the paper containing collection information in another plastic zip-lock bag. Put all these bags into another bag to keep them together. Tightly seal all bags to prevent the possibility of live insects (including the exotic redbay ambrosia beetle) in the wood from escaping.
- 4.** If you have digital photos of the plant, particularly the damaged portions, from which you took the sample, they can be helpful in deciding how to treat the sample. Please send these photos to Timothy.Schubert@freshfromflorida.com. Prefer photo files to be jpegs, less than 5 MB.
- 5.** Secure the samples in a sturdy box and write “laurel wilt samples” clearly on the outside.
- 6.** Send samples preferably by overnight mail early in the week so they can be quickly processed and don’t sit over the weekend. Send them to:

FDACS/Division of Plant Industry
Attn: Laurel Wilt Sample
1911 SW 34 Street
Gainesville FL 32608-1201
(352) 372-3505

When the samples arrive, someone familiar with laurel wilt will screen the samples. You will be notified of the laboratory analysis.

