

ISU Plant and Insect Diagnostic Clinic



Oak wilt sampling checklist

Oak wilt symptoms occur early in June and include wilting (droppy looking leaves and limbs), leaf yellowing and/or bronzing, followed by defoliation. When suspecting oak wilt, it is important to confirm the diagnosis to take the adequate management measures and protect other healthy oak trees in the area. Collecting the proper sample is key. Oak wilt samples have to be handled with care and mail refrigerated and as quickly as possible as the pathogen responsible for this disease cannot survive hot weather.

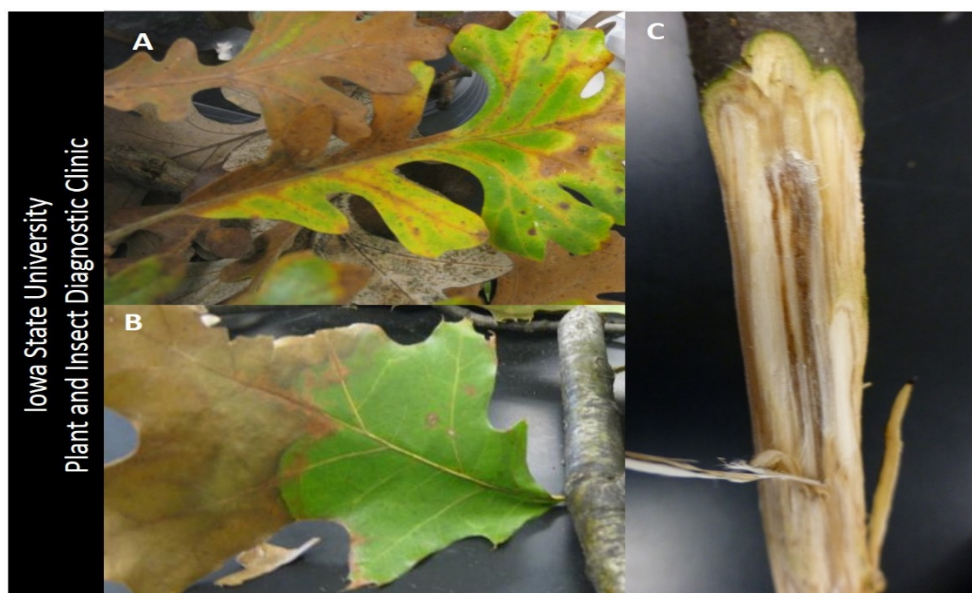
Visit clinic.ipm.iastate.edu to download a submission form to complete and include with your sample. Provide background information, such as when the symptom first appeared, as well as the pattern and distribution of the problem. Digital pictures can be very helpful. For tips on how to take pictures visit <https://hortnews.extension.iastate.edu/pidc/digital-photography>.

Follow this checklist when submitting samples for oak wilt testing:

Check out our short video <https://youtu.be/Fkqomb4pvsM> and follow the forest service guidelines at this [page](#).

In brief:

- Observe symptoms, look for the symptoms (wilting, yellowing and/or bronzing).
- Collect the sample only when you can either deliver it directly to the Clinic or to send it overnight (never send on a Friday!).
- Prepare a styrofoam or plastic chest and ice packs (see example in next page). **Refrigerate the sample** (from collection to delivery). The pathogen that causes oak wilt cannot survive in hot weather. If the samples are left in the truck or by the house porch for as few as a couple of hours the chances of recovering the pathogen significantly decrease.
- Select branches where symptoms are developing. Collect **3 to 6 living branches** from the symptomatic area in a tree. Branches should be at least **1 in diameter** and **6 to 8 inches in length** (we need branches, not twigs). With a knife peel the bark and inspect for vascular discoloration. When discoloration found,



Leaves with oak wilt symptoms: bronzing/bronzing on the white oak group (A) and wilt on the red oak group (B). Discoloration under the bark on vascular tissue (sapwood) on the branches (C).

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Extension and Outreach

PLANT and INSECT Diagnostic Clinic

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collect additional branches from that symptomatic limb.



Oak wilt sample and packaging example. Top left Styrofoam cooler. Top right, note the icepack (red arrows) on each side of the branches in the bag. Note submission form filled and enclosed in a separate bag. Bottom pictures, please remember to include leaves samples.

- Select some leaves, sending symptomatic leaves (bronzing) is a bonus, it gives important diagnostic information.
- Place your completed submission form in a bag to prevent it from getting wet.
- Ship the package early in the week via overnight delivery. Do not send on a Friday. Walk-ins are welcome!
- For more information about oak wilt visit:

Identify, Prevent, and Control Oak Wilt <https://www.fs.usda.gov/naspf/publications/how-identify-prevent-and-control-oak-wilt>

Collect Field Samples and Identify the Oak Wilt Fungus in the Laboratory

[https://www.fs.usda.gov/naspf/sites/default/files/publications/na-fr-01-99 how to collect field samples and identify the oak wilt fungus in the laboratory.pdf](https://www.fs.usda.gov/naspf/sites/default/files/publications/na-fr-01-99%20how%20to%20collect%20field%20samples%20and%20identify%20the%20oak%20wilt%20fungus%20in%20the%20laboratory.pdf)