

## **Sampling For Isolation Of The Oak Wilt Fungus From Oak Trees**

### Collection

#### **Plant Material Suitable**

#### **For Laboratory Isolation**

- Select limbs from an area of the tree that has unusual leaf symptoms or limb dieback
- Sample only limbs that are alive (dead limbs are frequently infected with other fungi making the oak wilt fungus non recoverable)
- Cut limbs using a hand saw or a chain saw

#### **Limb Size**

- Limbs should be 1.5 to 2 inches in diameter
- Cut 1-2 subsamples from each limb sampled
- Samples and subsample should be cut 6-8 inches long

#### **Number Of Limbs To Sample**

- Sample 3-4 limbs per tree

#### **Handling Of Samples**

- Place samples in plastic bags
- Place bags in an cool area or ice chest immediately
- Do not expose to direct sunlight

#### **Leaf Samples**

- Collect leaves from the sampled limbs and other areas of the tree where they appear to have an abnormal color and appearance
- Place leaves in a separate plastic bag in an ice chest with the limb samples

#### **Labeling**

- Label each sample that is taken
- Make sure the leaf sample number corresponds with the limb sample

### Storage Prior To Shipping

#### **Keep Cold**

- Prior to shipping, the samples need to be kept cold
- Do not freeze

#### **Laboratory Forms**

- Use form D-1178
- Fill it out as completely as possible
- Write on the form "sample for oak wilt"

- Form is available from the Texas Forest Service, the County Extension Office, or <http://cygnus.tamu.edu/index4.html>

### Shipping

#### **Preparation of Sample**

- Place bagged and labeled samples in an ice chest with a frozen refreezable package of blue ice or a purchased freezer block
- Sample numbers should be the same for the leaves, limbs and on the Form D-1178

### Laboratory Time

#### **How Long It Will Take**

- A return letter will be sent as soon as the fungus is properly identified
- Samples will take at least 3 weeks to complete
- Sample cost is \$20.00 per tree

### Evaluation of Results

#### **Positive Results**

- If the fungus is isolated from the limb tissue, initiate an oak wilt management program

#### **Negative Results**

- If the sample is negative, this does not necessarily mean that the fungus was not present in that tissue or in the suspect tree.
- Improper handling of the sample can result in the fungus not being recovered
- The oak wilt fungus does not grow continuous in a tree
- The more samples that are taken will increase the chance of recovering the fungus
- A second sampling can be useful in making a more positive evaluation
- Leaf symptoms, rate of death and pattern of spread can be used as aids in identification of the problem

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