Tubakia (Actinopelte) Leaf Spot on Oaks

This disease can occur on many species of oak, but are most prevalent on red oaks.

CAUSAL AGENT
*Tubakia* (formerly known as *Actinopelte* dryina) (fungus)
The fungus survives over the winter in affected twigs and foliage. In the following growing year, overwintering spores of this fungus are disseminated by wind and rain-splashing.

ENVIRONMENTAL CONDITIONS
This disease is most severe in late summer and early fall. This disease is more prevalent during years that are wet. Also, this disease often occurs on oak trees that are under various stresses such as nutritional deficiencies, in particular iron deficiency. Newly transplanted trees are more susceptible to attacks by this fungus than well-established trees.

SYMPTOMS
Leaf spots are circular in shape with a diameter of $\frac{1}{4}$ - $\frac{1}{2}$ inches, and are dark to reddish brown in color. Spots may coalesce to form irregular blotches. Spots are also typically surrounded by a chlorotic (yellowing) halo. Severe infected leaves prematurely defoliate.

MANAGEMENT
Determine the stress factors that may be predisposing the oak tree to this fungal pathogen. If possible, correct the conditions to minimize stress on the tree. With newly transplanted tree, ensure proper mulching and fertilization to encourage establishment. Infected leaves should be collected and destroyed to minimize the spread of the disease. Removal of some branches to increase air movement will also help minimize incidences of tubakia leaf spot. Trees that are severely defoliated by this fungus should be fertilized slightly more than normal to stimulate new growth. Although chemical treatments are not warranted, several broad spectrum fungicides are available for use as a preventative measure. For more information, please contact your local Extension county agent.