LEAF DISEASE OUTBREAKS ACROSS TEXAS

With the over-abundant rainfall and cooler than normal temperatures this spring and summer, oak trees are infected with a variety of leaf diseases that cause significant discoloration of leaf tissues and defoliation. Symptoms include a spotting and/or yellowish mottling of the leaf tissue, blistering and deformity of the leaf margins, small twigs with brown leaves randomly distributed within the tree canopy, and small gold fruiting structures on the undersides of leaves. The trees are frequently shedding these leaves as the leaf disease matures. Diseases that can be responsible for these problems include *Actinopelte spp.*, Oak leaf blister, *Diplodia spp.*, Anthracnose, and Oak rust among others (images below).

These problems are only confined to the leaf tissues, though with *Diplodia spp.* small twigs an inch or two long die. Branches remain alive and viable on the tree for new leaves to form. The trees are not dying. Fungicides are ineffective at this point as new infections do not occur with elevated night temperatures during the summer. Raking up and disposing of the leaves on the ground is a good strategy to remove the local inoculum. This is a natural occurrence during high rainfall years and the trees will recover on their own.

This is not oak wilt. Oak wilt leaf symptoms are completely different. Also a pattern of mortality in the stand of trees over time is not apparent, i.e. an infection center radiating out over the landscape for several years.

Trees in Texas encounter many problems from our stressful weather conditions. Last year, drought was responsible for damage to the trees. This year too much moisture plays a role. Yet, trees, especially oaks, are tough. They go through these cycles of nature and keep on growing.
Actinopelte spp.

Oak leaf blister
Diplodia spp.

Anthracnose
Oak rust