



# TEXAS A&M FOREST SERVICE

## *Tree Health Issues:*

## **Bacterial Leaf Scorch**

### **What is Bacterial Leaf Scorch and how does it hurt my tree?**

**Bacterial Leaf Scorch (BLS)** is caused by the bacterium *Xylella fastidiosa*. It's a systemic disease which invades the xylem (tissues that conduct water and nutrients) and clogs the tissue, thus disrupting the transportation of water. BLS affects many woody and herbaceous plants and is known to be spread primarily by spittlebug (Cercopidae) and leafhopper (Cicadellidae) insect families. *Xylella fastidiosa* also causes Pierce's Disease of grapevines, and Phony Peach Disease.

### **What are the symptoms and what is it sometimes confused with?**

The leaves of the tree will start to brown prematurely in midsummer. By late summer and fall, the leaf margins will be entirely brown. Sometimes the dead brown tissue is separated from the healthy green tissue by a thin yellow border. If more leaves continue to turn brown prematurely over time, the tree will die



from lack of energy production due to the green chlorophyll not being able to perform photosynthesis. BLS is sometimes confused with Oak Wilt, Dutch Elm Disease, traditional leaf scorch (caused by cultural practices such as over-fertilization).

### **What species are affected?**

American Sycamore, mulberry, grape, American elm, sweetgum, boxelder, dogwood, red maple, and sugar maple. Oaks affected are, southern red, shingle, scarlet, pin, bur, willow, water and live species.

### **How can BLS be treated?**

There is no cure for BLS, once the bacteria is present, but good management practices can delay onset and extend longevity of the tree. Proper irrigation and mulching of the tree is a good start. Soil should be analyzed before applying any fertilizer. Monitoring and treatment of BLS infected trees must be performed annually to prevent worsening.

