NURSERY NEWS TO USE

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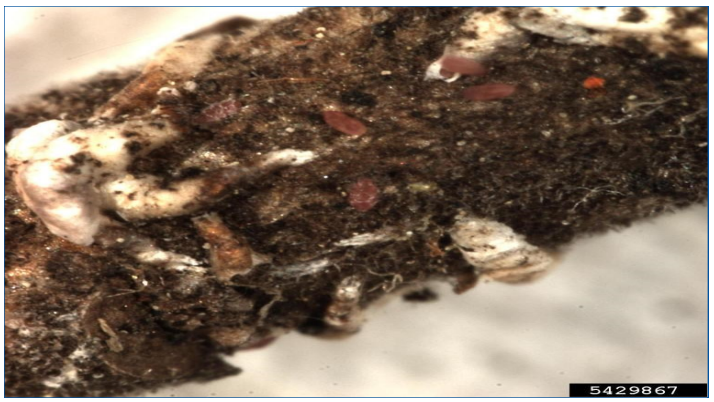
● Southern Blight, Dr. Fulya Basal-Gurel ● Soil Nutrition and Plant Deficiencies, Amy Dismukes ●

symptoms and signs of southern blight

Southern blight is caused by the fungus *Sclerotium rolfsii*. Some susceptible nursery crops include apple, crabapple, hydrangea, althea, dogwood, peach, azalea, forsythia, phlox and arborvitae. Although southern blight can infect plants over a broad range of temperatures, the pathogen favors those between 80-95°F and wet, humid conditions. The first visible symptom of southern blight is wilting or flagging of the leaves and immature shoots. Soon after wilting, the plant will turn brown and die. Sclerotia (small, light tan to dark reddish brown, spherical or irregular shaped, mustard seed like structures) and mycelium are the inoculum sources of this disease. Sclerotia can remain dormant in the soil for many years so early detection is important. When combined with good nursery management practices, applications of certain fungicides or biopesticides would be the most effective method to protect host plants, those that are known to be susceptible to southern blight disease. As the disease is more abundant during summer months, the first fungicide or biopesticide application should be done at the beginning of the summer (late May to Mid-June). Additional details on good nursery management practices and fungicide recommendations can be found at http://www.tnstate.edu/extension/documents/Southern%20Blight%20Management.pdf. For more information, please contact Dr. Baysal-Gurel at fbaysalg@tnstate.edu.

2ND GENERATION JAPANESE MAPLE SCALE CRAWLERS ARE ACTIVE NOW! **SPRAY!**

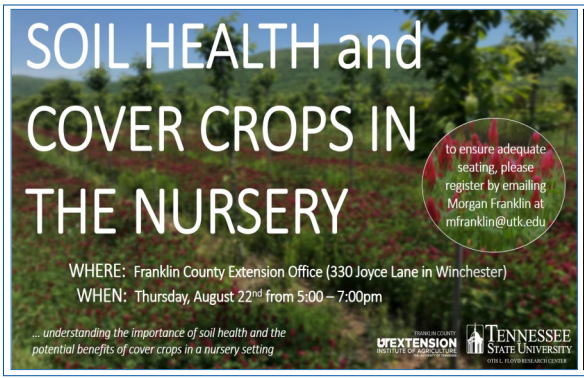


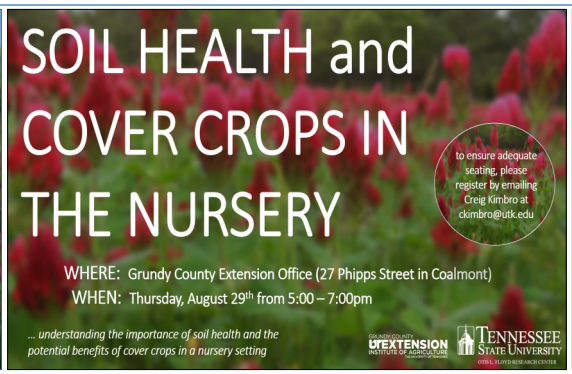
'Tokyo Tower' fringe tree showing symptoms of iron deficiency

Not all plant problems are caused by insects or diseases. Plants need the right combination of nutrients to live and grow. When plants suffer, they show symptoms of being unhealthy. Sometimes an unhealthy plant may be suffering from a nutrient deficiency or even a toxicity. Too little or too much of any one nutrient can cause problems. Nutrient deficiencies often manifest as discoloration, often in distinctive patterns, veinal or interveinal, chlorosis (yellowing) and eventual necrosis (brown, dead), or distortion of tissues. Stunted growth and poor flowering can also be symptoms of a nutrient deficient plant. Each plant species has a specific set of required nutrients for good growth. All of these nutrients are taken in through the roots. Water transfers the nutrients from the soil to the roots, therefore, water is a requirement of sufficient plant nutrition. Waterlogging and flooded soils, however, can make it very difficult for plants to take up nutrients effectively. A second requirement is appropriate soil pH for the plant being grown. Each species also has a preferred pH range that must be satisfied to be able to access the nutrients in the soil. Some plants are picker than others, but if the soil pH is off, the plant will not be able to take in nutrients no matter how rich the soil may be.

A soil analysis will assist in determining soil nutrient health if you notice any signs of deficiency. Tissue analysis is another option when a particular species is showing symptomology. For more information on soil testing or any other topic, please feel free to contact me . Amy Dismukes at adismuk1@tnstate.edu.

UPCOMING EVENTS AND PROGRAMS





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