



College of Agriculture,
Food and Environment
Cooperative Extension Service

Kentucky Nursery LISTSERV Bulletin

University of Kentucky Nursery Crops Team

End of September 2018

Warmer and Wet Start to October

Average high and low temperatures for Kentucky in October tend to be 68°F and 47°F respectively, but long range forecasting predicts warmer than average temperatures for the first week and a half of the new month. This warmer pattern may shift down to cooler than average temperatures as we approach the end of the second week, though a dramatic shift is not certain.

Precipitation rates for the first half of October are expected to be above average (typically around 3" for the month). With our already saturated soils, this will make fieldwork in the coming weeks difficult to schedule, especially if it involves heavy equipment.

Please see the [UKAg Weather Center's Long Range Outlooks](#) for more information.

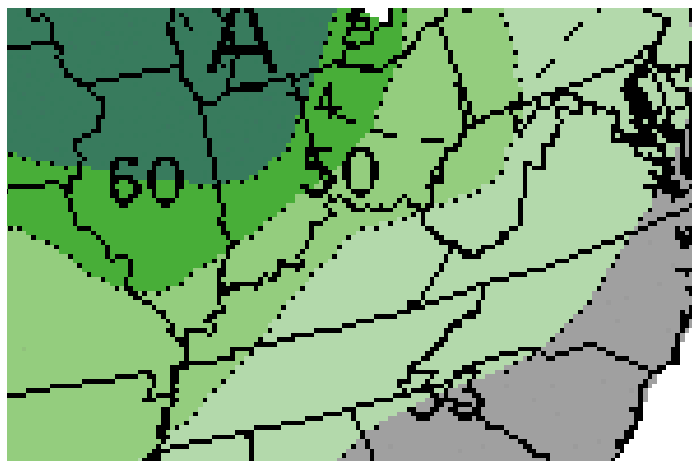
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Joshua Knight, Managing Editor



8-14 Day Outlook, Precipitation Probability
September 26, 2018. Valid Oct 4—Oct 9, 2018
Source: NOAA Climate Prediction Center

- **Tree Wounds — Invitations to Wood Decay Fungi**
- **Bacterial Leaf Scorch Can Torch Landscape Trees**
- **Controlling Fall Webworm**
- **Container Nursery Fertility Monitoring Demonstration on October 4th**



Tree Wounds — Invitations to Wood Decay Fungi

Nicole Ward-Gauthier, Extension Specialist, Plant Pathology
Kimberly Leonberger, Extension Associate, Plant Pathology

Wood decay leads to loss of tree vigor and vitality, resulting in decline, dieback, and structural failure. Wounds play an important part in this process since they are the primary point of entry for wood decay pathogens. While other factors may also result in decline and dieback, the presence of wounds and/or outward signs of pathogens provides confirmation that wood decay is an underlying problem. Wounds and wood decay reduce the ability of trees to support themselves.



Figure 1. Lawn equipment damage to the base of a tree.

Image: Cheryl Kaiser, UK

Wounds may result from numerous sources such as lawn equipment (Figure 1), pruning, vehicles, herbicides, insects, wildlife, weather, or objects that girdle or embed in trunks or branches (Figure 2). Once stress or damage from wounds occurs, fungal decay pathogens may enter plants to cause further damage. During rainy seasons and moderate temperatures, many wood decay fungi produce visible reproductive structures, such as shelf-like fungal bodies (Figure 3) or mushrooms.



Figure 2. Wire from stakes and fences creates wounds and can lead to girdling.

Image: Nicole Ward-Gauthier, UK

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For more information on tree wounds and related disease problems, including symptoms, causes, prevention, and treatment, review the publication *Tree Wounds – Invitations to Wood Decay Fungi* ([PPFS-OR-W-01](#))



Figure 3. When weather conditions are favorable, the shelf-like fungal fruiting structures of some wood decay pathogens may be visible.

Image: Joseph O'Brien, U.S. Forest Service

Additional Information

- *Tree Wounds – Invitations to Wood Decay Fungi* ([PPFS-OR-W-01](#))
- Plant Pathology Publications ([Website](#))

Bacterial Leaf Scorch Can Torch Landscape Trees

Nicole Ward-Gauthier, Extension Specialist, Plant Pathology
Kimberly Leonberger, Extension Associate, Plant Pathology

Kentucky's landscapes are populated by many trees that are susceptible to bacterial leaf scorch. This disease may not kill trees instantly, but over time, it can have devastating effects. Pruning and reducing stress can prolong the life of infected trees; however, there are currently no methods to prevent or cure bacterial leaf scorch.

Bacterial Leaf Scorch Facts:

- Infected trees exhibit premature leaf browning (Figure 1), marginal necrosis, and defoliation. In subsequent years additional branches will present the same symptoms until the entire tree becomes prematurely brown (Figure 2).
- Symptom development typically occurs in mid- to late summer
- Symptoms of bacterial leaf scorch can resemble abiotic/stress, so confirmation by a diagnostic lab is advised.
- Trees such as sycamore, maple, and oaks are susceptible. Pin oak and red oak are the most commonly reported hosts in KY.
- Caused by the bacterium *Xylella fastidiosa*
- Spread by leafhopper and treehopper insects.

Management Options:

There is no cure for bacterial leaf scorch, and trees will eventually die once infected. The following suggestions may help preserve the appearance and life of diseased trees:

- Prune newly infected trees to preserve appearance.
- Water trees in the heat of summer to reduce stress
- Tree-injections can be costly and do not cure the disease; however, they may prolong the life of the tree.



Figure 1. Premature leaf browning of a pin oak tree branch infected with bacterial leaf scorch.

Image: John Hartman, UK



Figure 2. Pin oak tree that has turned entirely brown prematurely from many years of bacterial leaf scorch infection.

Image: Nicole Ward-Gauthier, UK

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Replace infected trees with species that have shown resistance to the disease.
Suggestions include:

- European beech
- Kentucky coffeetree
- Shagbark hickory
- Common sassafras
- Tuliptree

Additional Information

- Bacterial Leaf Scorch (PPFS-OR-W-12)
http://www2.ca.uky.edu/agcollege/plantpathology/ext_files/PPFShtml/PPFS-OR-W-12.pdf

Scouting and Controlling Fall Webworm

Savannah McGuire, Research and Extension Support Staff, Horticulture

As winter approaches, there are fewer pests that require serious action and intervention. However, recognizing important chronic pests allows you to develop long range management plans. The fall webworm is a pest that is distributed throughout most of the United States and Canada. It will feed on almost all shade, fruit and ornamental trees except for evergreens. In Kentucky some of the preferred trees include American elm, maples, hickory, and sweetgum.

The fall webworm differs from the eastern tent caterpillar and the forest tent caterpillar in that fall webworms always place their tent on the end of branches and there is usually more than one generation each year.

The fall webworm caterpillar is about one inch long, is very hairy and is pale green or yellow. They may have either a red or black head. The blackheaded larvae have black spots along the back while the redheaded have orange to reddish spots. The blackheaded larvae will create a flimsy web while the redheaded larvae make a larger, more dense web. The first generation of caterpillars start to feed sometime in mid-spring to early summer. After feeding, they pupate in the soil and a second generation of webworms will be observed during August or September. The second generation of webworms usually causes more defoliation than the first generation.



Figure 1. Fall webworm moth

Image: Utah State University



Figure 2. Fall Webworm larvae

Image: Virginia Tech

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Control of all three of these pests is essentially the same. Destroying the tents, especially when the tents are small, is an effective way of getting rid of the caterpillars. The best time to do this is around dusk or early morning when the larvae are in the tent. Burning the tents should be avoided because the fire and intense heat may damage the tree. On smaller trees, egg masses may be pruned off and destroyed. For larger trees or trees that have several nests, a spray may be needed. *Bacillus*



Figure 3. Fall webworm tents

Image: G.K. Douce

thuringiensis (Bt) and a number of chemical insecticides are effective against these caterpillars. If an insecticide application is made, it should be made when the larvae are small and easiest to control, not when they are full grown and have already done their damage. The insecticide should be applied in the evening or early morning when the insects are in the nest. A high pressure spray may be needed in order to get the insecticide into the tents.

Of course, ALWAYS READ AND FOLLOW LABEL DIRECTIONS FOR SAFE USE OF ANY PESTICIDE!

More Information:

UK EntFacts Tent Caterpillars #424

<https://entomology.ca.uky.edu/ef424>

Kentucky Pest News

<https://kentuckypestnews.wordpress.com/2018/09/11/late-season-sights-2/>

**Thursday,
October 4th, 2018**

At 5:00 pm

Container Nursery Fertility Monitoring Demonstration

**HOSTED BY
University of Kentucky
Department of
Horticulture
&
Abrams Nursery**

**LOCATED AT
4609 Glenarm Road
Crestwood, KY 40014**



The University of Kentucky's **Nursery Crop Extension Research Team** is based out of two locations across the bluegrass to better serve our producers.

The **University of Kentucky Research and Education Center (UKREC)** in **Princeton** serves western Kentucky producers while our facilities and personnel on main campus in **Lexington** serve central and eastern Kentucky producers.

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Visit us on the web at

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