College of Agriculture, Food and Environment
Cooperative Extension Service

Kentucky Nursery LISTSERV Bulletin

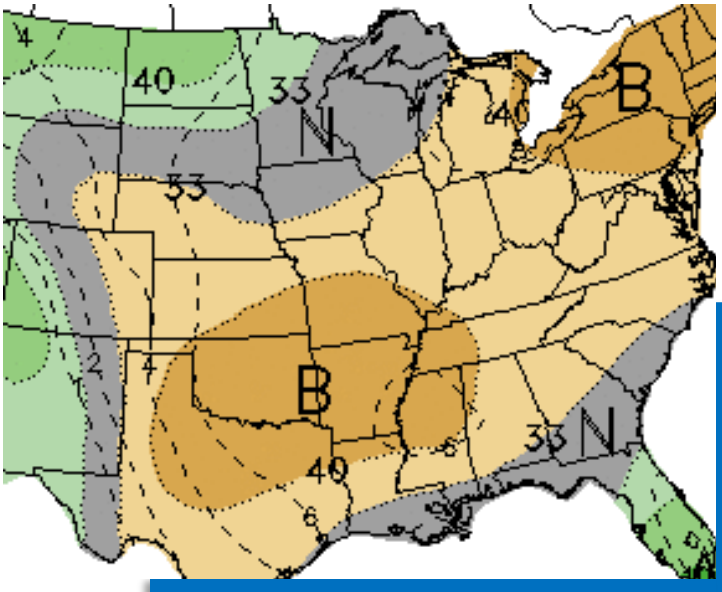
University of Kentucky Nursery Crops Team | End of May 2020

Drier Than Average First Half of June

The first half of June is likely to be drier than average across the Commonwealth and throughout the region stretching from Texas up into New England. This pattern is currently predicted to give way to an overall wetter than average June for the entire southeastern U.S.

Warmer than average temperatures should dominate forecasts in June for Kentucky as well as the Midwestern U.S. in general.

See **UKAg Weather's Long Range Outlooks** for a variety of forecasts of temperature and precipitation probabilities.



June 05 – 11, 2020, Precipitation Probability
Image: NOAA Climate.gov, 28 MAY 2020

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- **Avoid Introduction of Boxwood Blight into the Landscape**
- **Encouragement for 2020**

Avoid Introduction of Boxwood Blight into the Landscape

Kimberly Leonberger, Extension Associate, Extension Plant Pathologist
Nicole Ward Gauthier, Extension Professor, Plant Pathology

Boxwood blight can be devastating to American boxwood cultivars, which are common in the Kentucky landscape. Complete defoliation can occur within a week and plants can die within a single growing season. Use of tolerant cultivars, cultural practices, and fungicides can reduce incidence and spread of boxwood blight.

Boxwood Blight Facts:

Figure 1. Early symptom of boxwood blight include the development of circular leaf spots with dark borders.

Photo: Nicole Ward Gauthier, UK

- Symptoms on leaves can appear as light or dark brown circular leaf spots with darker borders (Figure 1). These symptoms often go unobserved due to rapid defoliation. Defoliation of the lower plant canopy is often the first obvious symptom of boxwood blight (Figure 2).
- Dark brown or black streak-like lesions appear on infected stems (Figure 3).
- Favored by warm, humid weather.
- Caused by the fungus *Cylindrocladium buxicola*.
- The pathogen can survive buried in soil for 1 year and on plant debris for at least 6 years.
- The disease may be spread by splashing water, wind, tools, clothing, and wet hands. Long distance movement is reliant upon the transport of infected plants, infested soil, or contaminated equipment.

Avoid Introduction of Diseased Plants:

Careful selection of healthy plant material is the first step to prevent spread.

Figure 2. Defoliation of the lower portions of the plant is often the first noticeable symptom of boxwood blight.

Photo: Nicole Ward Gauthier, UK

- Inspect nursery plants carefully; do not purchase unhealthy or symptomatic plant material.
- Discuss concerns with landscape contractors before new landscapes are installed.
- Nurseries and garden centers should communicate plant history with suppliers before receipt of new material. All shipments should be inspected before unloading.

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Cautiously Introduce New Plants into Established Landscapes:

Protect established landscapes, especially if valuable boxwood are on site.

- Introduce only symptom-free plants into landscapes.
- If valuable or established boxwood already exist, avoid hasty introduction of new boxwood plants. Move new plants in slowly by setting up a transitional site or quarantined area that can serve as a holding area for four weeks. If plants remain vigorous and symptom-free, they are likely safe to introduce to landscapes.

Table. 1. Susceptibility of 23 commercial boxwood cultivars to boxwood blight

(Compiled from research by Ganci, Benson and Ivors, North Carolina State University, 2012. Refer to latest cultivar trial results at http://plantpathology.ces.ncsu.edu/pp-ornamentals/)

Highly susceptible	*B. sempervirens* 'Suffruticosa' *B. sinica* var. *insularis* 'Justin Brouwers'
Susceptible	*B. microphylla* var. *japonica* 'Morris Dwarf' *B. microphylla* var. *japonica* 'Morris Midget' *B. sempervirens* 'Jensen' *B. sempervirens* 'Marginata' *Buxus* X 'Glencoe' (Chicagoland Green) *B. sempervirens* 'American' *B. sempervirens* 'Elegantissima'
Moderately susceptible	*Buxus* X 'Green Mound' *Buxus* X 'Conroe' (Gordo) *B. microphylla* 'Green Pillow' *B. microphylla* 'Grace Hendrick Phillips' *B. microphylla* 'Jim Stauffer' *Buxus* X 'Green Mountain'
Moderately resistant	*B. microphylla* 'Winter Gem' *B. sempervirens* 'Dee Runk' *B. sempervirens* 'Fastigiata' *Buxus* 'Green Gem' *B. microphylla* 'John Baldwin'
Most resistant (recommended for new plantings)	*B. microphylla* 'Golden Dream' *B. harlandii* *B. sinica* var. *insularis* 'Nana' *B. microphylla* var. *japonica* 'Green Beauty'

Management Options:

If boxwood blight is suspected, contact your local Extension agent, who may submit a sample to the UK Plant Disease Diagnostic Lab for confirmation.

If boxwood blight is confirmed, the following management options are recommended:

- Diseased boxwoods in landscapes should be removed immediately to prevent spread.
- Replant landscapes with boxwoods that have disease tolerance. Some recommended cultivars are listed in Table 1.
- Diseased boxwoods grown for commercial sale should be destroyed and not sold.

Once boxwood blight has been diagnosed in the landscape or nursery, take these steps to prevent infections to nearby healthy boxwoods:

- Increase plant spacing and prune dense shrubs/trees within the landscape to allow for air movement, reduced humidity, and rapid leaf drying.
- Minimize overhead watering and sources of leaf wetness that can increase fungal spore production.
- Fungicides do not cure boxwood blight. Use of fungicides can help protect nearby healthy plants, but residual protection lasts only 7 to 14 days.
- Homeowners can utilize fungicides containing chlorothalonil to protect plants from infection or suppress disease development. Always follow label directions when utilizing fungicides.
- Commercial growers and retail centers should contact UK Extension Agents and/ or Specialists for specific fungicide recommendations.

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Additional Information

- Boxwood Blight (PPFS-OR-W-20)
- Homeowner's Guide to Fungicides (PPFS-GEN-07)
- Landscape Sanitation (PPFS-GEN-04)
- Susceptibility of Commercial Boxwood Varieties to *Cylindrocladium buxicola* (North Carolina State University)
- Best Management Practices for Boxwood Blight (Virginia Cooperative Extension)

Encouragement for 2020

Joshua Kight, Extension Associate, Horticulture

What a strange year 2020 is turning out to be. First came the onset of COVID-19, which has caused an interruption in the way business is being conducted, then there was the strange spring with two hard freezes. It would be nice to hit the reset button for 2020, but unfortunately that is not possible. Even with the difficulties that the nursery industry has seen, it appears that yet again the industry has risen to the challenge and made the necessary changes to overcome these major setbacks.

The nursery industry appears to be very strong, even with the downturn in the economy. People who are stuck working from home and have had to cancel vacations are choosing to work on their personal landscapes, either by doing that themselves or hiring a landscape contractor, increasing the need for landscape materials and plants. Several nursery growers reported this was their best March ever.

Instead of focusing on the doom and gloom, the industry should look at the many positive aspects that have occurred. The industry seems to have weathered the freezes with minimal long-term damage to crops. The majority of work is outside where it is easier to maintain social distancing. There has been an increase in demand for plant material. Nursery employees seem to be healthy. Even though the immediate future is characterized by uncertainty because of COVID-19, the nursery industry will emerge out of this pandemic stronger than ever.

Nestled in the Olympic National Park in Washington is a tree that appears to defy the laws of gravity.

Photo: Daily Mail

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.

Check out our YouTube Channel!

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