

## Boxwood Blight

### Found in PA in 2012

Boxwood blight, a disease that affects boxwood, pachysandra, and sarcococca, was first found in Pennsylvania in 2012. This disease is caused by the fungal species *Calonectria pseudonaviculatum*, and can result in complete leaf loss and blight of the plant. The disease cannot be identified from visual symptoms, due to the fact that similar symptoms can be the result of other issues.

### Regulatory

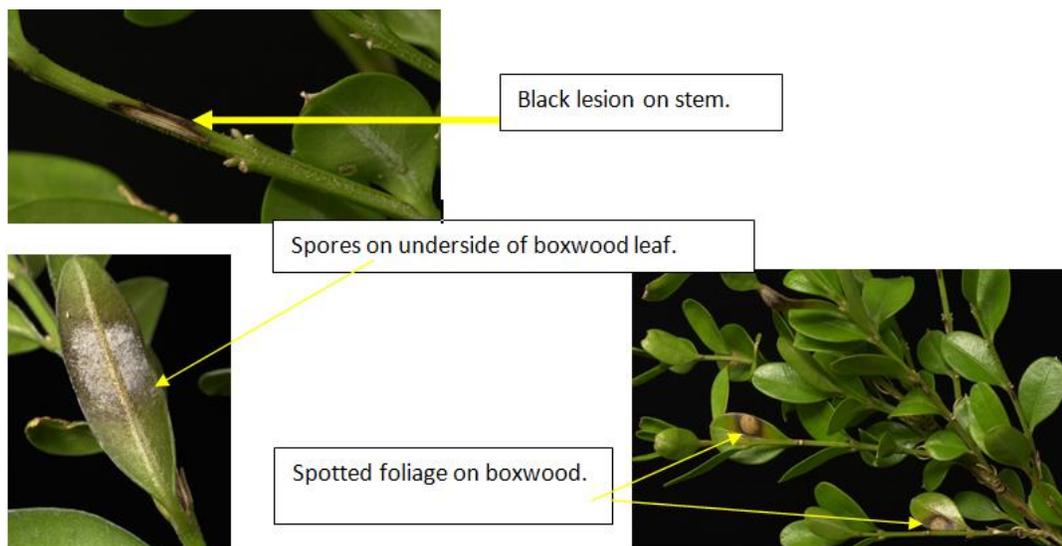
The Pennsylvania Department of Agriculture has declared boxwood blight to be a “regulated pest.” The goal of regulating this disease is to stop its artificial spread by human activities, particularly the propagation and distribution of infected boxwood and other host plants such as sarcococca and pachysandra. On June 25, 2016 the Department implemented a Quarantine to prevent the introduction into or movement of Boxwood Blight in Pennsylvania.

### Disease Cycle

Boxwood blight has a rapid cycle, capable of being completed in one week and lives in temperatures between 41 – 86 degrees F. The optimum temperature for attack is 77 degrees. Infections occur quickly under warm humid conditions (temps of 64 -77 degrees primarily from July through October). High humidity or leaf wetness is required for infection. Spores germinate and penetrate leaves within 5 hours; no wound is necessary. The disease is dormant November through June.

### Symptoms

It is necessary to have a laboratory confirm the presence of the fungus to accurately diagnose the disease; it does look like other diseases. The infection will start as leaf lesions/stem cankers. Lesions progress to leaf blight. Sporulation may be visible on undersides of infected leaf during moist conditions. The interior of the plant will be defoliated with healthy foliage at tips of branches. Stem cankers may still be visible.





## Transmission

Spores of the fungus can be spread by insects, animals and horticultural tools. Spores can be carried on clothing and hands. Blight can be wind disseminated and also spread through splashing from rain and irrigation and transmitted through diseased plant debris. Spores from diseased material may be in the soil on leaf debris and may be viable for 10 or more years.

## Treatment

Currently there are several studies being conducted to determine appropriate treatment methods and resistant varieties. To date no cure for the disease has been determined. Protectant fungicide sprays can prevent healthy plants from becoming infected, but will not cure a plant that is already diseased. Fungicide sprays may only mask the problem until conditions are right for disease expression.

## Varieties susceptible

Hosts include:

Buxus sempervirens 'suffruticosa' – English Boxwood

Buxus sempervirens – Common Boxwood

Sarcococca spp. – Sweet-box

Pachysandra spp. – Japanese spurge and Allegheny spurge

Dwarf English Boxwood is most susceptible

## DO's and DON'Ts

If you suspect you may have symptomatic boxwood plants:

- **DO** contact your local Pennsylvania Department of Agriculture Regional Office or your Penn State Cooperative Extension County Agent.
- **DON'T** destroy material until further instruction from PDA. Based on level of infestation, PDA will provide guidance on proper methods for disposal/destruction.
- **DON'T** compost plants or cuttings. PSU is currently studying the effects of composting on the spores that cause the disease.
- **DON'T** replant the potentially infected area with boxwood.
- **DO** sanitize tools, equipment and gloves especially during the infection period between July and October.
- **DO** thoroughly wash all clothing.

Source: Pennsylvania Department of Agriculture

<http://www.agriculture.pa.gov/Protect/PlantIndustry/Boxwood/Pages/default.aspx>