

Update on the Boxwood Blight Situation in Virginia (11/11/13):

Boxwood blight, caused by the fungus *Cylindrocladium pseudonaviculatum*, is a serious disease of boxwood that can cause complete defoliation of plants and is of serious consequence to nursery growers, landscapers and homeowners alike. This fall, box blight was found in several locations outside of the site in Carroll County where the disease was first found in Virginia in 2011. These new locations include Chesterfield County, the City of Richmond, and, most recently, Fairfax County. In both the Richmond and Northern Virginia areas, the disease was found in both a garden center and one or more home landscapes. Boxwood plants at the affected garden centers have either been destroyed or are in the process of being destroyed.

Growers, landscapers and homeowners who sell or plant boxwoods should learn to recognize the symptoms of this disease so they can avoid accidental introduction of the disease to new sites. Most boxwood cultivars are susceptible to the disease; thus, the most important means of control is to avoid introduction of infected plant material. Please refer to the following factsheet on this disease for a more detailed description of the symptoms (<http://pubs.ext.vt.edu/PPWS/PPWS-4/PPWS-4.html>). Additional information on this disease can be found at the following web site: <http://plantpath.cals.ncsu.edu/ornamentals>.

Some boxwood cultivars appear to have tolerance to box blight. In some cases, this has led to accidental introduction of the pathogen to new locations. Tolerant cultivars may not show noticeable symptoms, but the pathogen can still produce spores on the plant. When infected tolerant plants are introduced to a landscape, nursery or garden center, the disease can rapidly spread to nearby susceptible plants. This is the likely means by which the disease was introduced to several landscape sites in Virginia.

Box blight is difficult to control. Research on the best methods for box blight control is ongoing. Our current recommendations are to:

1. Obtain an accurate diagnosis of plants with symptoms of box blight.
2. If plants are positive for box blight, it is best to either burn plants on-site, if allowed, or double-bag affected plants and remove to the landfill to prevent spread.
3. The pathogen survives on fallen leaves and leaf litter can be heavy under affected plants. In cases where it is too difficult to rake, bag and remove leaf litter, it may be possible to use a handheld flame torch to burn leaf litter.
4. One strategy for protecting existing boxwoods is to avoid bringing new boxwood plants onto a property.
5. If new plants are purchased, they should be examined very carefully for leaf spots and black stem streaking, which are characteristic for the disease. Any

- new plants should be kept isolated from existing plants for a period of at least a month and monitored for disease development.
6. If you have recently purchased and planted boxwood plants this fall, especially in counties where the disease has been found, monitor plants carefully for disease development.
 7. Avoid cutting tips for holiday greenery from affected plants.
 8. Be aware that holiday boxwood greenery could harbor the pathogen. Keep this in mind, especially when discarding greenery after the holidays. Bag and remove boxwood greenery. Do not leave old, discarded greenery in the landscape where it could serve as a source of inoculum for boxwood plants.
 9. Sanitize tools used for pruning plants with a recommended disinfectant, such as household bleach (10%), or a product containing quaternary ammonium (e.g. Lysol with quaternary ammonium, Physan 20, GreenShield).
 10. Do not compost discarded greenery or plant material from plants known to harbor the box blight pathogen.
 11. Some fungicides will control the disease preventatively; however, preventative fungicides must be applied every 7 to 14 days while weather is conducive to disease, so the cost may be prohibitive. Fungicides with the active ingredients, chlorothalonil or fludioxonil (e.g. Daconil Weather Stik, Spectro 90WDG, and Medallion), were the most effective in fungicide trials in North Carolina.
 12. **Commercial growers** should refer to recommendations for **Best Management Practices for Boxwood Blight** (http://anla.theknowledgecenter.com/anla_docs/docs/government%20relations/Boxwood%20blight/BBWG-BMPs-Version1.pdf).

Please encourage clients who observe suspicious symptoms on boxwood to submit plant samples for diagnosis to the Virginia Tech Plant Disease Clinic (<http://www.ppws.vt.edu/extension/plant-disease-clinic/index.html>) through the local county VCE office (<http://www.ext.vt.edu/offices/index.html>). Care should be taken to double-bag plant material: place symptomatic stems and leaves in a sealable plastic bag and then place that bag inside another sealable plastic bag for mailing.

The VT Plant Disease Clinic will continue to send out information on the box blight situation in Virginia as the need arises.