Boxwood Blight Management in Landscapes Cliff Ruth, Extension Area Agent and Regional Certification Program Coordinator, Western 30 Counties, NC Cooperative Extension

Boxwoods are a very widely used landscape plant but recently have become heavily infected with a relatively new pathogen: Boxwood Blight (*Calonectria pseudonaviculata*). This pathogen started showing up in nurseries in 2011 and has started to spread into landscapes over the past 3-4 years. The pathogen can't be controlled effectively in the landscape and caution must be made to prevent the spread.

The pathogen starts out with small brown spots on the leaves and black sunken cankers along the stems. The brown spots eventually grow with darker rings around the outside of each. The entire leaf will turn tan or straw-like in color and drop. Leaf drop may appear to be sudden with the lower branches becoming defoliated early. Unlike root rot pathogens (that also attack boxwoods) the roots system will remain relatively healthy.

The disease can be transmitted by tools or by handling infected plant parts including pruning and moving of clippings; raking leaves; contact with clothing and movement to non-infected plants; as well as on the tools used to maintain the plants. Birds and other animals can also move the pathogen from infected to healthy plants.

If you have or suspect that you have boxwood blight, follow the steps below to prevent the spread of the pathogen:

- Disinfect pruners and other tools frequently within and between different blocks of plants, especially between different field locations or landscapes in counties suspected to have box blight; *
- Never working in fields or landscapes when the plants are wet;
- Wearing clean disposable booties or washing off debris and dirt entirely from soles of shoes between different boxwood fields or landscapes, especially in counties suspected to have box blight;
- Wearing clean tyveks or laundering clothes between different field locations or landscape areas in counties suspected to have box blight;
- Burning or burying box-blight infected plants on-site (composting is not recommended);
- NEVER discarding boxwood waste material where it could contaminate other boxwood plants

*The best way to sanitize tools is to dip them for TEN SECONDS into these products and then allowing the tools to dry: ethyl or isopropyl alcohol at 70-100% (most Lysol formulations, grain/rubbing alcohol), sodium hypochlorite (10% Clorox or other brands of household bleach- the same as 1 part bleach to 9 parts clean water- made fresh each day), phenolics at 0.4-5% (trade name Pheno-Cen), or quaternary ammonium at 0.5–1.5% (trade names Greenshield, Consan Triple Action 20, Physan 20).

While home gardeners can purchase and spray various fungicides on non-infected plants (list in references below); these products must be used with caution and prudently. If home owners wish to use a landscape company to do this, they should make sure that the company is license in the state on NC to apply pesticides and hold both a commercial pesticide license as well as the proper insurance to protect against any liability.

If you suspect that you have Boxwood, Sweet Box, or Pachysandra species that may be infected with this pathogen please contact your local Cooperative Extension office to have an agent assist you in getting the plant material to the laboratories for proper analysis and diagnosis.

Some reference material that can be referred to:

https://plantpathology.ces.ncsu.edu/wp-content/uploads/2013/05/Ivors-box-blightfungicides.pdf?fwd=no

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http://www.ncagr.gov/PLANTINDUSTRY/Plant/disease/BoxwoodBlight.htm

https://swain.ces.ncsu.edu/2015/09/boxwood-blight-update-2/