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## UPDATE ON BOXWOOD BLIGHT (NOVEMBER 2012)

## **Boxwood Blight in Connecticut**

Since the confirmation of the first natural infection of pachysandra (*Pachysandra terminalis*) in the landscape by *Cylindrocladium pseudonaviculatum* (*Calonectria pseudonaviculata*), the boxwood blight fungus, by The Connecticut Agricultural Experiment Station (CAES) on 29 June 2012, many additional properties with infected pachysandra have been confirmed in Connecticut. In most cases, the landscapes contained plantings of both boxwood and pachysandra, for which both hosts had been confirmed positive for *C. pseudonaviculatum*. Pachysandra infections appear to have originated from infected boxwood. Additionally, there is no evidence of boxwood blight-infected pachysandra in production facilities or in outlets or garden centers. These findings significantly changed possible approaches to managing this pathogen on properties where both hosts are present and required modification of guidelines for property owners and landscape professionals for managing this disease (*Guidelines for Reporting and Managing Boxwood Blight in Connecticut Landscapes Version 2.0* by S. M. Douglas,

http://www.ct.gov/caes/lib/caes/documents/special features/boxwood blight/guidelines for reporting and managing boxwood blight in connecticut landscapes version 2 10-12-12.pdf). Management guidelines are now based on the host plant affected—properties with boxwood, pachysandra, or both boxwood and pachysandra. These management practices are based on what is known about the biology, dispersal, and survival characteristics of this plant pathogen. However, they are subject to modification on the availability of new information from the research efforts of the "boxwood blight working group."

Boxwood infected with *C. pseudonaviculatum* continue to be shipped into Connecticut from production nurseries in several states—these plants are subsequently sold and planted in residential and commercial landscapes. To date, all CT properties where boxwood blight has been detected installed at least one new boxwood plant in either 2011 or 2012.

Regulatory actions on boxwood blight in Connecticut are under the statutory authority of The Connecticut Agricultural Experiment Station (CAES). Regulatory actions by CAES inspectors have focused on minimizing the spread of boxwood blight—this is accomplished by determining the sources of infected material, conducting trace-backs or trace-forwards when appropriate, and providing guidelines for disposal of infected plants and cleanup of plant debris, and strategies for managing the health of any existing boxwood and/or pachysandra on a property.

Since last year's detection of boxwood blight in some production nurseries in Connecticut and subsequent destruction of infected plant material and implementation of BMPs at these locations, none have tested positive for boxwood blight. This suggests that increased awareness and the protocols outlined in the BMPs have helped to minimize any new outbreaks in the state.

## Boxwood Blight in US and Canada

To my knowledge, no new states have been confirmed as boxwood blight-positive since the last update listing 10 states in the US (NC, CT, VA, RI, MD, MA, OR, NY, PA, and OH). Boxwood blight has now been found in 3 provinces in Canada (BC, ON, QC).

From discussions with colleagues in other states, a round of new infections were reported in spring 2012, but it appears that the weather of the 2012 summer season worked in our favor rather than in favor of the fungus in most locations—hot, dry conditions in many states where boxwood blight had been reported resulted in fewer infections than anticipated, given the assumption of overwintering inoculum and rapid spread. Once the weather moderated near the near of the season, new infections were diagnosed in October.



Established planting of pachysandra infected by *Cylindrocladium pseudonaviculatum*.



Diagnostic necrotic lesions with yellow haloes on pachysandra naturally infected with *C. pseudonaviculatum*.



Residential property with established plantings of pachysandra and boxwood infected with boxwood blight. Photos by CAES.



Newly installed infected boxwood (circle) adjacent to established pachysandra that was naturally infected.