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Boxwood Blight in commercial nurseries

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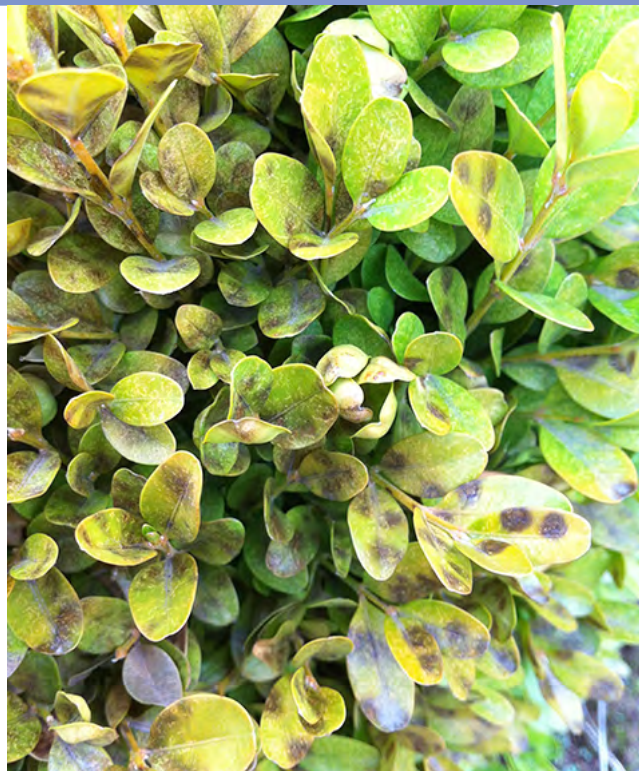
Initial symptoms



Light brown spots with darker, brown to purple edges develop on the leaves.



Foliar spots may continue to grow and merge until the whole leaf is affected.



Leaf spots in the fall, outdoors. High humidity, rain, and poor air circulation create ideal conditions for disease.



Leaf spots in late spring. A combination of humid conditions with temperatures between 64°F–80°F (18°C–27°C) favors infections.



Leaves become bronze colored (take on a blighted appearance), and leaves drop rapidly (defoliation).



Black streaks or lesions appear along the stems together with an angular, diamond-shape spot. This is a distinctive diagnostic characteristic of the disease.



Stem lesions in fall in a greenhouse.



Stem lesions, late spring, in a greenhouse. High humidity and overhead irrigation create perfect conditions for the disease.



Symptomatic plants in the greenhouse.
Observe defoliated stems.



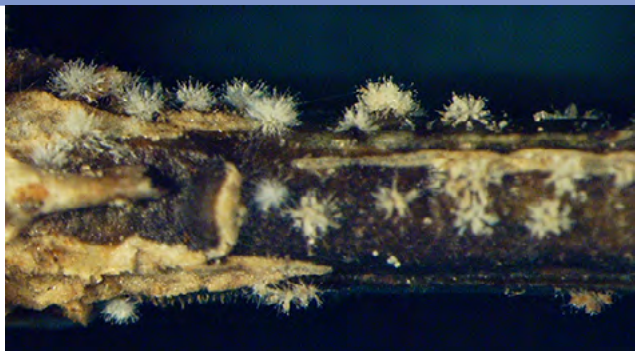
New growth is mostly unaffected on symptomatic plants.



Symptomatic container plants at nurseries, outdoors. Note excessive leaf debris during mild winter conditions.



Roots of plants infected with *C. pseudonaviculata* remain intact and appear healthy, as shown here.



Spore masses can be observed on affected leaves and occasionally on affected stems with a magnifying lens. Spores are sticky. In high humidity, the fungal spores germinate and penetrate the host plant within 5 hours.



Destroy all infected plants and plant material. Burial or incineration is recommended.

Boxwood plants are susceptible to other pathogens that produce symptoms that could be misidentified as boxwood blight, such as *Volutella* blight (caused by the fungus *Volutella buxi*), boxwood decline, and *Macrophoma* leaf spot.



Volutella blight symptoms on boxwood. The fungus produces salmon-colored fruiting structures.



Macrophoma leaf spot: Leaves turn yellow, then drop; black dots on leaf surface are the fungal fruiting structures.



Under laboratory conditions, both *Sarcococca* species and *Pachysandra* (above) can be infected by *C. pseudonaviculata*.

Outdoors

In the Pacific Northwest, the disease is not very active during the summer.

Scout more often in the fall and through winter, after the rains begin.

Look for:

- Bare stems
- Black stem lesions
- Light brown leaf spots (not always present)
- Excessive leaf debris/defoliation (more obvious during fall through spring)



Indoors/Greenhouse

The disease can be present during any season.

Outdoors and Indoors

When scouting, be careful as you move around plants. Spores can be very sticky. You might accidentally spread them if you touch an infected plant.

If you think you have an infected plant, remove it from the area and continue to watch it for developing symptoms.

Front cover and pages 1, 12, 17:

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Pages 2, 9, 13, 14, 15:

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Pages 3, 4, 5, 6, 7, 8, 10, 11, 16:

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