

Boxwood (*Buxus* spp.)-Volutella Leaf and Stem Blight (Canker)

Pseudonectria buxi (also called *Volutella buxi*) is a fungal pathogen that causes a disease of boxwood (*Buxus* spp.). This disease has been reported in several countries in Europe and North America and has been traditionally considered the primary cause of boxwood decline, although box blight caused by *Cylindrocladium buxicola* has become more aggressive. Plants of *B. sempervirens* were delivered to Ekoplan plant diagnostics laboratory exhibiting bronzed, yellow, and blighted leaves, stem dieback symptoms, and white/salmon-pink sporodochia on leaves and stems were observed. The plants were still alive, but diseased leaves and twigs were yellowed and showed dieback.



Plants of *B. sempervirens* exhibiting bronzed, yellow, and blighted leaves, stem dieback symptoms, and orange sporodochia on leaves and stems were observed. The sporodochia of this fungus can be seen on the underside of leaves. Black streaks may be found on some petioles or on stems near petiole attachment. Photo by Malgorzata Kepler; Ekoplan ivs

Symptoms Branches die back and leaves turn from green to light green-yellow and finally to shades of tan. Affected leaves turn up and lie close to the stem. These symptoms are similar to winter injury, except that numerous, small, salmon-pink fungal spore-producing structures (sporodochia) appear on lower surfaces of affected leaves and branches.

Cause *Pseudonectria buxi* (asexual: *Volutella buxi*), a fungus that survives in affected branches and leaves. Infection often occurs at the bases of small dead shoots, or in crotches where leaves have accumulated, or through pruning wounds. One-month-old leaves were much more susceptible than 1-year-old leaves.

Cultural control

- Prune out and burn dead branches.
- Remove dead leaves from crotches areas inside the canopy.
- Minimize wounding especially when new growth is present.
- Maintain good air circulation and drainage.
- Avoid high humidity (>85%) for long periods.
- Grow plants in well-drained media or soil with a pH between 6.8 and 7.5.

Chemical control Spray fungicides in spring, before new growth starts, and again in late spring anytime wounded tissue may occur such as after pruning.