

Boxwood Decline

TREE DOCTOR TIPS

Boxwood Decline

DESCRIPTION:

Boxwood decline is a condition that causes weak growth, discoloring of leaves and branch dieback in boxwood shrubs. This condition usually involves several factors, including poor planting conditions and improper cultural practices, as well as stem and root diseases. Boxwood planted in a poor environment typically show symptoms within a few years.

HOSTS:

Although all boxwood varieties can be affected, boxwood decline mainly affects American and English boxwood shrubs.

BIOLOGY AND SYMPTOMS:

Planting in a poor environment, combined with over-pruning, over-mulching and improper watering, can lead to boxwood decline. Initial symptoms include inner leaf shed, which can expose twiggy growth to infection from stem canker fungi. Excessive leaf drop then encourages shallow root systems that, in turn, become vulnerable to extremes in moisture and temperature. In moderate climates, certain microscopic worms (nematodes) can stress the plant, resulting in root damage and loss. Boxwood decline symptoms typically include weak, sparse or spindly growth, yellow-orange discoloration of foliage and premature leaf drop.

MANAGEMENT:

To prevent boxwood decline or improve affected plants, follow these horticultural practices: fertilize regularly to increase plant vigor; mulch lightly- about a two-inch depth, keeping mulch several inches away from trunk; water deeply during dry periods; and thin out dense center foliage annually to improve light and air circulation, and to help prevent inner defoliation and twig canker. It is easy to over-do-it when thinning boxwoods, for the best results contact your local arborist.



A



B

FIGURE A. BOXWOOD PSYLLID HAS DISTORTED THE LEAVES ON THE SHOOT ON TOP; SHOOT BELOW HAS NORMAL LEAF DEVELOPMENT

FIGURE B. BOXWOOD LEAFMINERS HAVE CAUSED THIS BLISTERING, AND LARVAE ARE FOUND INSIDE THE FRESHLY OPENED LEAF

*The scientists at **The Davey Institute** laboratory and research facility support our arborists and technicians in diagnosing and prescribing based on the latest arboricultural science. For specific treatment and application details, your arborist may consult *The Davey Institute PHC Handbook*.*

