Shot Hole Disease

DAVEY Institute

TREE DOCTOR TIPS

Shot Hole Disease
(Wilsonomyces carpophilus)

DESCRIPTION:
Shot hole is a leaf disease that produces brown spots on plant foliage that eventually dry out, fall and leave multiple holes in the leaf.

HOSTS:
Prunus spp. such as plum, cherries, and laurels.

BIOLOGY AND SYMPTOMS:
Wet and humid weather, particularly in spring, contributes to the spread of shot hole disease. The disease starts as spots on tree leaves that gradually grow in size. The host tree will use natural defenses to halt growth of the fungal spots. As a result, the spots turn brown, dry out, and eventually drop out, causing the leaf to be covered in holes. The disease is most severe in mid to late summer.

MANAGEMENT:
If warranted, a fungicide program can help reduce the infection, however, additional tree care is needed to help restore the plant's health. Talk to a professional arborist about a copper-based fungicide treatment. Copper contains antifungal elements and is a key source of nutrients for soil. Combining a fungicide with plant health care can increase the odds of eliminating shot hole disease.

If a tree has shot hole disease, be sure to limit overhead tree watering—especially during wet weather periods—as any excess water on the foliage will promote spread of the disease.

In addition, prune trees to provide air circulation throughout the canopy.

Without proper circulation, plants remain damp and moist, creating the ideal environment for the development and spread of shot hole disease. When leaf drop occurs in fall, rake infected leaves from the tree's bed to discourage the disease from reinfecting next spring.

A

B

FIGURE A. SHOT HOLE DISEASE ON ENGLISH LAUREL

FIGURE B. VISIBLE HOLES IN LEAVES, DUE TO SHOT HOLE DISEASE

*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.*