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W289-H IMP QuickFacts Series: Southern Blight

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Southern Blight

Sclerotium rolfsii



Host Plants

- Ajuga
- Aucuba
- Azalea
- Black walnut
- Crabapple/Apple
- Forsythia
- Hosta
- Hydrangea
- Rose
- Viburnum
- Many hosts

Introduction

Southern blight is caused by the fungus *Sclerotium rolfsii*. It is also known as southern stem rot.

Pathogen and Disease Cycle



Sclerotium rolfsii overwinters in the soil and in plant debris as spherical structures called sclerotia. This fungus can be spread in runoff water, eroding soil particles and on items such as tools, shoes and plant containers. Generally, the fungus doesn't survive at depths greater than 2 to 3 inches; however, it can survive for years in the soil. It prefers a hot, wet environment with acidic soil conditions.

Monitoring

This disease appears during the hot months of June, July and August. Look for scattered dead plants. One way to identify *Sclerotium rolfsii* is when both sclerotia and the white strand-like mycelium are visible on plants near the soil line. Sclerotia are spherical, tan to red, and resemble mustard seeds.



Symptoms

Common symptoms are yellowing leaves, sudden wilting, stems turning brown and dying near the soil line, and plant death. White mycelium may appear on the soil surface, on the lower stem/trunk, including just underground and on plant debris. Clusters of sclerotia may also appear on the host plant and plant debris close to the soil line. Infected trees can usually survive for a month, but plant death often occurs more rapidly shortly after symptoms are noticed. Most herbaceous plants wilt and die in a few days or less.



Integrated Pest Management

CULTURAL CONTROL

Prevent spread by cleaning boots, shovels, etc., after contact with contaminated soil. Do not replant with susceptible species. Increase air circulation with proper plant spacing and weed control. Remove infected plants and soil surrounding the plant. Be sure that cover crops are fully decomposed before replanting. Deep plowing will reduce the number of sclerotia on the surface where they can infect plants. Soil test and adjust pH per recommendations.

CHEMICAL CONTROL

Consult http://eppserver.ag.utk.edu/redbook/sections/trees_flowers.htm for the most up-to-date recommendations.

Resources

Photo credits: Amy Fulcher and Alan Windham, University of Tennessee

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