

Botryosphaeria Canker in the Home Garden

The fungus *Botryosphaeria* can cause a branch dieback on many woody ornamentals.

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Botryosphaeria canker on rhododendron.

Cankers girdle and kill twigs and branches of species such as horsechestnut, redbud, dogwood, beech, walnut, tulip poplar, sweetgum, crabapple, pine, oak, rhododendron, azalea, rose, willow, elm, and yew. Small black fungal fruiting structures which contain fungal spores develop in the canker.

Symptoms

- Rough, sunken, dark brown to black areas form around wounds or natural openings in the bark.
- The wood and pith of the branch is blackened or turn dark brown.
- Dead bark falls off the cankered area.
- Leaves on affected branches wilt as affected branches die.
- Cankers enlarge along the branch more quickly than around its circumference.

Botryosphaeria enters natural openings in the bark, such as lenticels or through pruning cuts and other wounds. Plants most susceptible to the disease are wounded plants that are under drought stress. The fungus remains dormant in the wood during the winter. Spores are windblown from branch to branch in the spring as the fungus resumes activity.

Management

- Prune affected branches late in dormancy before bud break. Destroy the infected tissue. Disinfect pruning tools between cuts by keeping them wet with 1 part household bleach:9 parts water for 10 minutes and rinsing or by dipping them in 70% alcohol and letting them air dry.
- Irrigate plants to prevent drought stress, especially during late summer and autumn.
- Protect plants from wounding.
- Plant resistant cultivars in areas prone to drought. The following hybrids of rhododendron have had less than 10% dieback per plant and therefore are considered to have some resistance to Botryosphaeria : Roseum Elegans, English Roseum, Lebar's Red, Cunningham's White, Roseum 2, and Boursault.
- Susceptible cultivars should not be planted in areas prone to drought stress or where there is severe competition for water. The following hybrids often have greater than 10% dieback per plant and are considered susceptible: Chionoides White, Wissahickon, Anna Rose Whitney, Spring Dawn, Doncaster, Catawbiense Album, Nova Zembla, Sweet Simplicity, Dr. Rutgers, and Lady C. Mitford.

Reference

- D. M. Benson, B. I. Daughtry, and R.K. Jones. 1991. Botryosphaeria dieback in hybrid rhododendron, 1986-1990. Biological and Cultural Tests 6:108.



Darkened pith.



Botryosphaeria canker on apple



Discolored wood in cankered area under the bark.

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