

Phomopsis Tip Blight

Gina Foreman* and Brian Hudelson, UW-Madison Plant Pathology

What is Phomopsis tip blight? *Phomopsis tip blight* is one of the most common fungal diseases of conifers in Wisconsin. Eastern red cedar, creeping and Rocky Mountain junipers, arborvitae, Douglas-fir, true firs, larch and jack pine are most commonly affected by the disease.



Die-back of juniper branch tips caused by *Phomopsis tip blight*.

What does *Phomopsis tip blight* look like?

Initially, small gray lesions (spots) form on the terminal four to six inches of new shoots in early spring. Infected branches typically first turn dull red or brown, and finally ash-gray as lesions expand to girdle and kill branch tips. Small, black pycnidia (the reproductive structures of the causal fungus) can easily be seen on dead branches with the unaided eye or with a hand lens. Severe infections may result in death of an entire plant.

Where does *Phomopsis tip blight* come from?

Phomopsis tip blight is caused by the fungus *Phomopsis juniperovora*, which survives in diseased branches. Spores of the fungus are produced throughout the growing season, and are spread by wind and rain. Infections can occur whenever new foliage is produced, and moisture or humidity is high. Most infections occur in the spring, but late summer infections can occur when over-watering or over-fertilization stimulates new growth.

How do I save a juniper with *Phomopsis tip blight*?

Prune out and destroy diseased branches as they appear. Always prune in dry weather

and cut four to six inches below obviously diseased areas on each branch. Disinfect pruning shears after each cut by dipping them for at least 30 seconds in a 10% bleach solution or alcohol (spray disinfectants that contain at least 70% alcohol can also be used). Use of copper-based fungicides or mancozeb may be needed for susceptible junipers. Make applications at seven to 21 day intervals during rapid plant growth in the spring. Be sure to read and follow all label instructions of the fungicide that you select to insure that you use the fungicide in the safest and most effective manner possible.

How do I avoid problems with *Phomopsis tip blight* in the future? Plant only resistant juniper species, varieties, and cultivars. DO NOT plant conifers in poorly drained sites or heavily shaded areas. DO NOT overcrowd trees and shrubs in new plantings. Provide adequate space between plants to promote good air circulation. DO NOT prune or shear conifers excessively as this stimulates overproduction of new, susceptible growth. If possible, DO NOT use overhead sprinklers for watering. Use a soaker hose instead. If you must overhead water, water early in the day to allow for fast drying of plants.

For more information on *Phomopsis tip blight*: See UW-Extension Bulletin A8KS711, or contact your county Extension agent.

*Completed as partial fulfillment of the requirements for Plant Pathology 875 – Plant Disease Diagnostics Clinic Internship at the University of Wisconsin Madison.

© 2002 by the Board of Regents of the University of Wisconsin System doing business as the division of Cooperative Extension of the University of Wisconsin Extension.

An EEO/Affirmative Action employer, University of Wisconsin Extension provides equal opportunities in employment and programming, including Title IX and ADA requirements. This document can be provided in an alternative format by calling Brian Hudelson at (608) 262-2863 (711 for Wisconsin Relay).

References to pesticide products in this publication are for your convenience and are not an endorsement or criticism of one product over similar products. You are responsible for using pesticides according to the manufacturer's current label directions. Follow directions exactly to protect the environment and people from pesticide exposure. Failure to do so violates the law.

Thanks to Karen Delahaut, Lis Friemoth and Ann Joy for reviewing this document.

A complete inventory of University of Wisconsin Garden Facts is available at the University of Wisconsin-Extension Horticulture website: whort.uwex.edu.