

## Extension Plant Pathology Phomopsis Blight Fact Sheet

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Phomopsis Blight – Phomopsis blight is one of two common blight diseases on junipers (the other is known as Kabatina Blight). These two diseases cause similar symptoms on the plant, but are caused by two different fungal species. This publication will primarily deal with Phomopsis blight, caused by *Phomopsis juniperovora*. This disease is a common landscape problem, particularly on young, newly planted specimens. Older, established plants can become infected, but the damage on these plants is generally less severe. It can also be a problem in container grown nursery stock.

**Symptoms** – The first symptom of the disease is dieback of the new growth. Infected shoot tips first turn light green or yellow in color. As the disease progresses, the infected tissues turns reddishbrown in color (Fig. 1). Eventually, infected branches turn ash-gray. Over time, large sections of the plant may become infected (Fig. 2). The disease may ultimately kill young plants and may leave mature plants unsightly with large areas of dead or dying needles (Fig. 3). In the summer, fruiting bodies of the fungus appear in infected tissue (Fig. 4). These fruiting bodies produce copious amounts of spores (Fig. 5) which may infect new succulent tissue under favorable environmental conditions.

**Disease Cycle** – Infection usually occurs in the spring. Spores produced in overwintering fruiting bodies are spread by water splash and air currents to new, tender shoots. Mature needles are fairly resistant to infection; therefore, infection is restricted to the shoot tips. New infections may occur late in the year if cultural practices which encourage late season growth are used.



Figure 1. Early stages of Phomopsis blight on juniper (Photo: L. Gallagher, Sandoval County, NM)



Figure 2. Advance Phomopsis blight on juniper (Photo: L. Gallagher, Sandoval County, NM)



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Figure 3. Phomopsis and Kabatina blight on established juniper planting (Photo: urbanext.illinois.edu)



Figure 4. Fruiting bodies of *Phomopsis juniperovora* on juniper (Photo: ISU Plant Disease Clinic)



Figure 5. Spores of *Phomopsis juniperovora* (Photo: plantpath.caes.uga.edu)

**Conditions for Disease** – Phomopsis blight is favored by cool to warm temperatures and wet or humid conditions. The disease can become severe under prolonged wet conditions. Likewise, the disease may be limited by dry conditions. Management – The disease is best managed by the use of resistant cultivars. The following Juniper species and cultivars are known to be resistant to Phomopsis: J. chinensis cv. Robusta Green, J. communis cv. Depressa, J. communis cv. Oblonga pendula, J. conferta, J. squamata cv. Fargesii, J. virginiana cv. Tripartita. Additionally, there are many more cultivars which have low susceptibility to the disease. Check with plant suppliers to find the best cultivars for your area.

Other management strategies include:

- Proper plant spacing which allows for good air circulation around the plants.
- Plant in well-drained soil in locations which receive plenty of sun.
- Avoid injury to the plants, especially in the spring and fall.
- Prune in the summer when conditions will be dry for several days.
- Remove and destroy infected branches and plants.
- Water early in the day so that the foliage dries quickly. Avoid overhead irrigation, if possible.
- Provide proper fertilization which promotes moderate (not excessive) growth.

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