The Plant Doctor's LANDSCAPE TIPS

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PHOMOPSIS OF BLIGHT JUNIPER

INTRODUCTION:

Junipers comprise a diverse family of coniferous evergreens (gymnosperms) that are widely used in landscapes. Phomopsis blight is a disease caused by the fungus Phomopsis juniperovora, which attacks many species of the cypress family, especially in the genus Juniperus. Under certain conditions, Phomopsis blight may cause severe dieback, making plants appear unsightly (Photo 1). In some situations, the disease may even be a limiting factor in health and survival of junipers. Eastern red cedar (Juniperus virginiana), Savin junipers, and creeping junipers are most often affected.

DIAGNOSIS AND SYMPTOMS:

Phomopsis usually attacks the new growth in the spring. Generally, only the new shoots are susceptible, resulting in shoot tip blight. Infected shoots are girdled by infection and become light green to yellow as they die. Later, affected shoots turn reddish brown and even later, an ashen grey color (Photo 2). Tiny black reproductive structures called pycnidia, analogous to mushrooms, may be easily seen in the grey foliage and stems, and is usually a confirmation of the presence of Phomopsis. Rainy periods and irrigation increase the incidence of disease. Abundant moisture causes an increase in fungal infections and subsequent release of thousands of spores (from pycnidia) that attack the newly emerging shoots in the spring.

The disease may be mistaken for a variety of other problems. For example, rodent injury to the base of juniper stems is fairly common during the winter months; as stems die during the following spring and summer, symptoms may mimic Phomopsis blight (Photo 3). Check for rodent injury by looking for chewing injury to the bark at the base of stems. Rodent injury generally appears as pinpoint damage (one whole branch or stem) while Phomopsis is dispersed more randomly over the plant.

MANAGEMENT OF PHOMOPSIS BLIGHT:

In low moisture conditions, for example where there is little to no irrigation or heavy spring rains, Phomopsis blight is generally not sufficiently serious to warrant concern. Where Phomopsis is a concern, redirecting or reducing irrigation will usually greatly diminish the incidence of disease (Photo 4).

Sprays of broad spectrum fungicides will also help reduce the incidence of disease and/or help plants recover from fungal infections. Fungicides in the benzimidazole class, such as thiophanate methyl (T-methyl G-Pro, Cleary 3336) etc., are highly effective against this disease.

For more information, please feel free to email me at robertsd@msu.edu or contact a professional plant health care provider. The author, MSU or MGIA do not endorse any particular products. If using pesticides, be sure to read and follow label directions.

Photo 1: This juniper hedge at a corporate site was severely affected by Phomopsis blight. Frequent irrigation of the adjacent lawn caused a substantial increase in disease incidence.

Photo 2: A closer view of Photo 1 shows abundant gray twigs and foliage so typical of Phomopsis blight infections.

Photo 3: Possibly mistaken for Phomopsis blight, this juniper is affected by rodent girdling of individual stems. Phomopsis tends to be more random over the shrub, affecting many different tips rather than one whole branch.

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Photo 4: Reducing and redirecting the irrigation system for the lawn, along with thiophanate methyl fungicide applications, induced a remarkable recovery of the hedge, previously viewed in Photos 1 & 2.