

Twig and Needle Blights of Juniper

Dr. Green Thumb

Arkansas Gardener – November/December

By: Stephen Vann

Twig and needle blights of juniper are an ongoing problem in Arkansas landscapes. Junipers with a horizontal growth habit often develop twig blight symptoms. Twig and needle blights may be caused by several fungal organisms which often enter the twigs through wounds created by insects or other sources. Some of the fungi can invade the needles and twigs without the presence of a wound. The most common twig and needle blights found in Arkansas are those caused by the fungal organisms *Cercospora* sp, *Phomopsis* sp, and *Pestalotiopsis* sp. These fungal organisms are common and widespread wherever junipers grow. The severity of the disease is exacerbated by overhead irrigation and high humidity.

The initial symptoms of disease are the presence of brown areas on the tips of branches. Infected twigs usually occur in a random distribution on the plant. Needle leaves become pale, then reddish brown, and then brown or ashen gray. If the bark of the infected twig is scraped away, there will be a sharp line between the healthy and diseased wood. Fruiting bodies of the fungi frequently form on the dead or dying tissue. The fruiting bodies look like small, dark-colored specks. Spores are produced year-round within these small structures. Wet weather is needed for the spores to infect juniper twigs or leaves. As the disease progresses, twig tissue begins to dieback toward the main stem. If left unchecked, the fungus can advance into the main stems and cause large sections of the plant to die. When new growth of the juniper coincides with wet, humid weather, disease can become severe. Plants grown in poorly drained soils and in shady conditions are more likely to develop twig and needle blight symptoms. Leaves near the bottom of the plant often develop symptoms earlier on horizontal types of junipers.

Prevent twig and needle blight diseases by avoiding overhead irrigations, and planting in well-drained soil with plenty of sunlight. Inspect plant material before planting. Remove and destroy infected plant parts. Twigs exhibiting dieback symptoms should be promptly removed by selective pruning followed by destroying the affected twigs. Fungicides containing myclobutanil, chlorothalonil, and propiconazole are effective when applied in such a manner as to protect newly forming twigs and leaves. Some copper-based fungicides are also effective. Fungicides should be applied at the first evidence of disease. Multiple applications may be required if wet weather conditions occur.

BYLINE: Stephen Vann is an associate professor and Extension urban plant pathologist with the University of Arkansas, Cooperative Extension Service.