

Leaf Spot of Redtip Photinia

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Introduction

Photinia leaf spot, caused by the fungus *Entomosporium mespili*, is a widespread and damaging disease on the popular ornamental shrub, redbtip photinia (*Photinia x fraseri*). The Indian hawthorn (*Raphiolepis indica*) and some pear cultivars (*Pyrus* sp.) are also susceptible to this disease. The disease is most destructive during cool, wet weather and when active growth is occurring.

Symptoms

The first symptoms of photinia leaf spot are tiny, circular, bright red spots which appear on both the upper and lower leaf surfaces. Numerous spots may coalesce into large purple blotches. Mature leaf spots develop a gray center (Fig. 1). Black specks within the spot represent the spore-producing bodies of the fungus (Fig. 2). The leaf spot will have a distinctive dark red to purple margin. Similar spots also develop on leaf petioles and stem tissues during cool, wet periods when the fungus is most active. Extensive leaf drop, which may result from severe infections, can lead to eventual plant death.

Disease Cycle

The fungus overwinters in infected leaves and shoots from the previous year. These are important sources for future disease outbreaks. Masses of spores are produced and released from the spots from late winter through spring. Spore dispersal slows during hot, dry periods. Fungal spores are mainly spread by splashing water. New leaf spots may appear 10 to 14 days after infection during warm, wet conditions in the spring.

On photinia, the reddish new flush of leaves is the most susceptible. Infections often start at the bottom portions of the plant and move upwards during cool, rainy periods. Practices that encourage a flush of succulent growth, such as summer pruning, frequent pruning and fertilization, often favor disease development.

Presently, there are no resistant selections of redbtip photinia to photinia leaf spot. Chinese and Japanese photinia tend to be less susceptible than the redbtip photinia. Levels of resistance are available in Indian hawthorn cultivars.

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Control

When planting, purchase only plants with no leaf symptoms. Provide adequate spacing between plants and avoid overhead irrigation to minimize leaf wetness. Remove and destroy fallen diseased leaves. Avoid over-fertilization and watering which may stimulate lush growth, and reduce pruning during the summer which promotes new growth. It may be necessary to remove severely infected plants and replace with a less susceptible species.

Plants with a history of leaf spot may require protectant fungicidal sprays in early spring. Routine

preventative fungicide applications may be required to maintain healthy specimens in the landscape. Fungicide choices include materials with the active ingredients of chlorothalonil, myclobutanil, propiconazole, triforine and triadimefon. Multiple applications may be necessary, beginning at bud break until all new foliage is matured. Fungicide sprays in combination with sanitation are needed to maintain healthy plants.

Consult Extension publication *MP154, Arkansas Plant Disease Control Products Guide*, for specific recommendations, available at www.uaex.uada.edu.



Fig. 1. Photinia Leaf Spot



Fig. 2. Fruiting Bodies of *Entomosporium mespili* Within Leaf Spots

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