

Entomosporium Leaf Spot of Indian Hawthorn

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By: Stephen Vann



WHAT IT IS

Indian hawthorn (*Rhaphiolepis indica*) is among several woody ornamental shrubs that are susceptible to leaf spotting caused by the fungus *Entomosporium mespili*. Other important host plants include flowering quince (*Chaenomeles spp.*), pyracantha (*Pyracantha coccinea*), some pear cultivars (*Pyrus sp.*), and “red tip” photinia (*Photinia fraseri*). This leaf-spotting fungus may also attack other members of the rose family. In the southern United States, Indian hawthorn and the “red tip” photinia are the most significant host plants. Most fungal infections occur in the spring when spores produced by the fungus are dispersed by wind and splashing water. Spores can be produced during the entire growing season, especially when moisture is present on the leaves and twigs. The disease is much more damaging during cool, wet weather. The fungus readily spreads and attacks plants when moisture persists on the foliage. Plants grown in moist, shady locations can readily be defoliated by this fungus disease. Even though this fungus is most obvious on the foliage, stem tissue can also become infected. Severe infections result in premature defoliation and, in some cases, plant mortality. Healthy plants that are isolated from other susceptible plants often remain healthy since spores of the fungus are usually splashed short distances from infected plants.

WHAT TO LOOK FOR

The first obvious symptoms of the leaf spot disease usually appear on new growth on the lower branches of the plant. Spots appear first as minute purple dots (up to 4 mm in diameter) on either surface of the leaf. The fungus gradually spreads upward within the plant. Under cool, humid conditions, spots may rapidly increase in size and number. Leaf spots may coalesce to form larger areas of dead tissue. Older spots develop a gray center with a raised margin of the individual spots. The centers of the spots contain the spore-producing bodies of the fungus. These structures appear like small, black specks about the size of black pepper grains.

PREVENTION TIPS

Growing resistant varieties is the best method of preventing this fungal disease. Resistant cultivars include Indian Princess, Gulf Green, and Olivia. For those growers already with existing infected plants, fallen leaves should be collected and destroyed in late fall or winter. If feasible, remove spotted leaves already on the plant. Avoid overhead irrigations to minimize leaf wetness. Irrigate with soaker hoses or drip tubes. Avoid summer fertilization that may promote abundant, lush growth in the fall. In the landscape, purchase plants with no leaf spots. Adequate spacing between plants should be provided to encourage dry leaves. Since the young leaf spots may be minute, infected plants may go undetected.

Several fungicides are helpful in managing this fungus disease when applied at regular intervals, beginning in the early growing season. Complete spray coverage of the shrub is essential for control.

Both sides of the leaves should be sprayed to ensure protection. Fungicides containing the active ingredients myclobutanil, propiconazole, or triforine are effective when applied according to the label.

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

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