

Entomosporium leaf spot – Entomosporium leaf spot is a common fungal disease on trees and shrubs in the rose (rosaceae) family. It can be particularly troublesome on indian hawthorne and red tip photinia. In some areas, these shrubs are no longer widely used in the landscape because of their susceptibility to this disease. Other hosts of this pathogen include pyracantha, pear, quince, loquat, and mountain ash.

Symptoms: Leaf spots first appear as small purple dots on either side of new leaves (Figure 1). As the disease progresses, spots increase in size and turn brown to gray in the center. Older spots maintain a thick, dark purple, border (Figure 2). The fungus spreads up the plant and as new growth develops, it quickly becomes infected. Spots may grow together creating large maroon blotches. Tiny black fruiting bodies develop in infected tissue. Numerous “insect-shaped” spores are produced inside the fruiting bodies (Figure 3). Mild infections result in cosmetic damage, but do little significant damage to the plant. Heavily infected plants, however, may prematurely defoliate weakening the overall health of the plant and increasing its susceptibility to environmental stress, insects and other diseases.

Conditions for disease – Infection usually begins in spring during periods of cool to warm (60 – 80 F), wet conditions. Under these conditions, spores produced on infected leaf tissue are spread to new growth by wind and splashing water. 12-24 hours of leafwetness is required for infection. New lesions are visible 10-14 days after infection. Spores continue to be produced and infection can occur throughout the remainder of the growing season, however, infection is slowed during hot, dry conditions.



Figure 1. Indian Hawthorne (*Raphiolepis indica*) infected with *Entomosporium* sp. (Photo: New Mexico State University – Plant Diagnostic Clinic).



Figure 2. Leaf lesions on Indian Hawthorne caused by *Entomosporium* sp. (Photo: New Mexico State University – Plant Diagnostic Clinic).



Figure 3. Spores of *Entomosporium* sp. (Photo: New Mexico State University – Plant Diagnostic Clinic).

Management – The disease is best managed by prevention. Resistant cultivars of indian hawthorne, such as Indian Princess, Gulf Queen Olivia, Dwarf Yedda, Georgia Petite, Majestic Beauty, and Snow White, should be used in areas prone to the conditions that favor disease. Unfortunately, there are no cultivars of red tip photinia that exhibit good resistance to this disease. Additionally, cultural practices which reduce inoculum and reduce favorable conditions for disease should be used.

Cultural practices which help to manage the disease include:

- Raking and destroying fallen leaves
- Pruning severely infected portions of the plant
- Avoiding overhead irrigation
- Avoiding summer fertilization which promotes abundant, lush growth in the fall
- Planting shrubs sufficient distance from each other to allow for good air circulation between plants and for leaves to dry quickly
- Pruning shrubs to increase air movement through the plant
- Do not purchase or plant any plants that have spots on the leaves
- In locations where conditions are routinely favorable for the development of the disease, fungicide may be helpful in reducing infections

For more information, contact: Natalie Goldberg, Extension Plant Pathologist (ngoldber@nmsu.edu)

Other images of Entomosporium leaf spot:



Entomosporium leaf spot on red tip photinia
(Photo: Mississippi State University)



Entomosporium leaf spot on red tip photinia
(photo: North Carolina State University)



Entomosporium leaf spot on red tip photinia
(photo: Oregon State University)