

## Entomosporium Leaf Spot of Photinia and Indian Hawthorn

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**E** ntomosporium (en tow moe spo ree um) leaf spot often damages red tip photinias (*Photinia fraseri*) and Indian Hawthorn (*Rhaphiolepis indica*) plants. This disease is a widespread and destructive fungal disease of woody ornamentals in the rose (Rosaceae) family. Other hosts for this pathogen include loquat, flowering and fruiting pears, firethorn and quince. The disease is most damaging to plants in home landscapes following periods of frequent rainfall in the spring and fall when temperatures are between 60 and 80 degrees F and when the plant is actively growing.

## **Symptoms**

The first signs of *Entomosporium* leaf spot disease are tiny, circular, often bright red spots on both surfaces of young expanding leaves. Small spots may coalesce to form large purple to maroon blotches on heavily diseased leaves. On Indian Hawthorn, blotches are typically bright red. Leaf spots on mature leaves of most plants have ash brown to light gray centers with a distinctive deep red to maroon border. On pears, the border of the leaf spot is typically brown and thin. Tiny black specks, fruiting bodies of the *Entomosporium* leaf spot fungus, are often found in the centers of the spots. Spots can also occur on leaf petioles and tender shoots.



Conidia (spores) of the *Entomosporium* leaf spot fungus.



Entomosporium leaf spot on Indian Hawthorn.



Severe leaf spots on Photinia.

Although light infections by this fungus usually produce minor "cosmetic" damage, severe infections can cause premature leaf loss. Severe leaf drop greatly reduces the landscape screening value of the plants, slows growth and increases the plant's sensitivity to environmental and cultural stresses.

## **Disease Cycle**

Spots on leaves, young shoots and fallen diseased leaves are important in the survival of the *Entomosporium* leaf spot fungus. Masses of spores are released from late winter through much of the growing season. The fungal spores are spread to healthy foliage by a combination of splashing water and wind. Under favorable conditions, spores germinate and infect young growth. Symptoms typically appear 10-14 days after infection.

## **Control Tips**

 Purchase only healthy plants that do not show leaf spot symptoms.

- Space plants adequately to allow good air movement. This helps to promote rapid drying of leaves and reduces the chances of infection.
- Remove fallen diseased leaves, particularly in the winter prior to the plant's new growth in the spring. This reduces a source of fungal spores available for new infections.
- Water only when necessary. This prevents excessive new tender growth. When it is necessary to water plants, do it early in the morning to allow the leaves to dry faster with the morning sun. This minimizes the time that the foliage stays wet. Surface or drip irrigation is the preferred method of watering since the leaves remain dry. Alternatively, adjust sprinklers to reduce or prevent splashing and wetting the foliage.
- Prune plants selectively and infrequently to help prevent excessive new growth.



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Avoid fertilizing the plant during the summer to limit excessive plant growth. New, succulent growth increases the susceptibility of the plant to infections.

✓ Fungicides, such as thiophanate-methyl and myclobutanil, can be used effectively to prevent Entomosporium leaf spots when conditions become favorable for developing the disease, such as in cool, wet weather with diseased plants growing nearby. Consult your local Extension agent or retail nursery for the proper fungicide to use when such situations arise. Always refer to product labels for instructions on proper usage of the fungicides. Fungicide applications are not necessary during hot, dry periods.



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