

Diseases and abiotic disorder of Indian Hawthorn in South Florida

This is a pictorial of diseases of Indian Hawthorn, (*Rhaphiolepis indica*) occurring in south Florida. This pictorial does not include all the diseases affecting Indian Hawthorn in lower Florida but those one would reasonably expect to encountered. *Entomosporium* leaf spot, which is caused by *Entomosporium mespili*, and is reported in some literature to be the most common and damaging disease of Indian hawthorn, is not a disease of concern in south Florida. Only a properly equipped plant disease clinic can unequivocally indentify a leaf spot disease.

Indian hawthorn is commonly found throughout southeastern U.S. It tolerates temperatures down to 10°F. It grows in small mounds and is used for borders, as a high ground cover or short a hedge.

Anthracnose leaf spot/blight, *Colletotrichum* spp. Cape Coral, Florida, August



Leaves on plant



Unaffected and affected leaves.



Front of leaf



Underside of leaf

Anthracnose is caused by several fungi including *Colletotrichum* spp. Infected leaves develop tan to reddish brown lesions that are typically associated with leaf veins. This pathogen spreads by spores that are easy to splash with irrigation water or rainfall, but since they are somewhat sticky, they do not easily spread by simple air movement, from the wind or fans. Wounding can increase disease severity but it is not necessary for pathogen to enter.

Twig Blight, *Botryosphaeria* sp./spp. Fort Myers, Florida, March



Leaves on plant



Shoot dieback



Front of leaves



Underside of leaves

Diplodia/Botryosphaeria corticola and possibly other species cause branch and shoot dieback and flagging of woody ornamentals in Florida. Symptoms are more pronounced during hot summer months, especially during droughts. The damage caused by this disease is most severe on old or weakened plants. Old trees or shrubs exposed to unsuitable growing conditions, mechanical injury, or damage by insects may eventually be killed.

Cercospora leaf spot, *Cercospora* sp. Cape Coral, Florida, January



The plant on the left is almost completely defoliated. Defoliation has started on the plant to the right.



Leaves on plant



Underside of leaves as the disease begins.

Cercospora leaf spot of viburnum, rose, Indian hawthorn, and other woody ornamentals is caused by a few species of the fungal pathogen, *Cercospora*. Fungi of the genus *Cercospora* are parasitic and infect a broad range of plants. Leaf spots are usually circular, involving small to large portion of the leaf. They are reddish to grayish brown. Under ideal conditions, the disease causes severe defoliation. This disease often occurs during warm, moist summer months. The infection starts from the bottom of the canopy and progresses towards the tips where new growth is present. The size is variable depending on the species or variety on which the lesions occur. When symptoms begin to appear, a small purplish area becomes apparent. In older lesions a small necrotic area develops and increases in size as the disease progresses. At this point, the center of the spot turns tan to almost gray as the cells become brown and die.

Abiotic Disorder, Wimauma, Florida, December



Severe defoliation not determined to be disease caused.



Non-parasitic disorder

Non-parasitic disorder

No pathogens were isolated from the samples in Wimauma, Florida. Damage may be caused by insects or cultural or environmental conditions.

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