

Plant Disease Notes

Common Leaf Diseases of Strawberries

Strawberries are susceptible to a number of different leaf diseases. Listed below are the three most common fungal leaf diseases found in Alabama.

Common Leaf Spot

Symptoms. Common leaf spot, caused by the fungus *Mycosphaella fragariae*, first appears as small ($1/8$ inch in diameter), round, purplish red spots on the upper leaf surface. Spots increase in size (up to $1/4$ inch in diameter) and may remain round or become somewhat irregular. Later, the spots develop grayish white centers that are surrounded by purple to rusty brown borders. Similar spots develop on the lower leaf surface, but the colors are less intense. Leaf death can occur when numerous spots merge. Symptoms that may appear on other plant parts are similar to those that appear on the leaves. This disease, when severe, can stunt or kill infected plants.

Persistence and Transmission.

The fungus survives on volunteer plants in a dormant state (sclerotia) between growing seasons. The disease is often introduced into

production fields on infected transplants. Spread within a field is primarily caused by splashing water. High rainfall and warm temperatures favor rapid disease development.

Leaf Blight

Symptoms. Leaf blight, caused by the fungus *Dendrophoma obscurans*, is easily confused with common leaf spot. Leaf blight lesions begin as round, purple spots with gray centers. In time, the spots become targetlike with a dark brown center surrounded by a lighter brown zone and a purple, red, or yellow margin, which blends into the healthy green tissue. Older lesions are usually V-shaped with the widest part at the leaf edge. Small, black, pepperlike structures (spore-producing bodies) develop in the dark brown central area.

Persistence and Transmission.

Leaf blight develops best in warm, wet weather but may become severe at any time of year. Spores are produced under favorable conditions and are blown or splashed to other surrounding leaves or plants where new infections take place.

Leaf Scorch

Symptoms. Leaf scorch or red spot, caused by the fungus *Diplocarpon earliana*, first appears on the upper leaves of infected plants. Small, purplish areas expand into 1/4-inch diameter purple to red spots with brownish centers, not white or gray as with common leaf spot. In time, the spots merge, giving infected leaves a purplish or reddish cast. Leaves that are infected dry up, their margins curl upward, and they assume a burned (scorched) appearance. Scorch lesions may also develop on petioles, fruit peduncles, calyxes, flowers, and fruit. Infected calyxes appear dry and make fruit unattractive, lowering the fruit's market value. Infected petioles may be girdled and result in death of leaves and fruit.

Persistence and Transmission.

The fungus can survive from season to season in dead leaves. Spores are spread to healthy leaves by splashing water, and the disease is favored by warm (70 to 80 degrees F) weather.

Control of Common Leaf Diseases of Strawberries

Fungal leaf diseases of strawberries—common leaf spot, leaf blight, and leaf scorch—can be controlled by the following strategies:

- Apply protective fungicides from dormancy through harvest.
- Plant resistant, disease-free transplants. (Refer to Extension publication ANR-633, "Commercial Strawberry Production.")
- Avoid overhead irrigation if possible.



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Use chemicals only according to the directions on the label. Follow all directions, precautions, and restrictions that are listed.

For more information, call your county Extension office. Look in your telephone directory under your county's name to find the number.

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