

# The Plant Doctor

## *Sooty Mold*



### **Sooty Mold**

#### *Most common seasons*

Spring, summer, fall

#### *Weather*

Any, but gets worse during fair to hot weather.

#### *Affected plants and materials*

Any outdoor structure; many plants but especially gardenias, camellias, laurels, azaleas, and crepe myrtles.



Figure 1. Sooty mold on holly in the early spring. Notice the flaking from the leaf.



Figure 2. Vigorously growing sooty mold on holly. Note the sooty mold fungi are producing stalks (conidiophores) to launch their spores into the air.

Sooty mold is a frequent problem on the leaves of many evergreen shrubs including azaleas, camellias, laurels, and gardenias. It can also be a problem on deciduous trees and shrubs including crepe myrtles, Chinese elms, hollies, silver maples, or sugarberries, or on plants growing beneath any of these plants. You may also see the black “sooty mold” on walls, sidewalks, fences, automobiles, or almost anything else that has dropped from plants above them.

### **Quick Symptoms**

Sooty mold is usually a black powdery coating that develops on leaves and twigs. Sometimes the black layer may be hard and stick tightly to the leaf. During spring rains, the black layer may flake off or peel away from part of the leaf, leaving healthy looking green areas with splotches of the black sooty mold (Figure 1).

### **The Fungi and the Harm It Causes**

There are several fungi or molds that cause this problem, but they all grow in a sugar or honeydew layer that has been deposited by insects (Figure 2). If you solve the insect problem, the sugar deposits will stop, and the sooty mold will slowly go away.

Fungi that cause sooty mold do not attack plants directly, but obtain their nutrients from the honeydew itself. Although the fungi do not feed on the plants, they can indirectly destroy the beauty of the plant and, if the concentration of the mold is heavy enough, shade out enough light to yellow and stunt the plant. In severe cases, the plant or plant parts may die, but this is probably due to damage caused by the insects.

The fungi spread from one plant to another by water-splashed spores and hyphal fragments, and by air-borne spores.

## Honeydew

Some insects such as aphids, soft scales, and white flies eat by sucking plant sap. Plant sap is rich in sugar but not as rich in other items the insect requires in its diet. This means the insects are eating excess sugar, and they have to get rid of it. When they do this, the honeydew falls on the plant or onto plants or structures below the host plant.

You can control sooty mold by controlling the insects that produce this sugar-like material. There are several insecticides or combinations of insecticides available to control these sucking insects. The insecticide used will depend upon the insect, the host plant, and any safety considerations. Insect identification and insecticide selection are discussed in Extension Publication 2369 *Insect Pests of Perennial Plants in the Home Landscape*.

Once sooty mold is established, it is not easy to remove. The best method to remove the mold is to soak affected plants in a water and detergent mixture. Use 1 tablespoon of household liquid detergent per gallon of water and spray it on the plants. Wait 15 minutes, then wash the detergent solution off with a strong stream of water. You may have to repeat this treatment a number of times over a few weeks. Generally speaking, the mold will gradually dry and flake off once the insects are under control. The mildew will continue to age over the winter, and most will flake off during the early spring (**Figure 1**).

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Information Sheet 1938 (POD-07-18)

By Alan Henn, PhD, Extension Professor, Biochemistry, Molecular Biology, Entomology, and Plant Pathology.



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Extension Service of Mississippi State University, cooperating with U.S. Department of Agriculture. Published in furtherance of Acts of Congress, May 8 and June 30, 1914. GARY B. JACKSON, Director