Sooty Mold of Woody Ornamentals

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Introduction

Sooty mold occurs on many woody ornamentals in the home landscape. It is not considered an infectious plant disease. Sooty molds may be caused by several fungi; however, Capnodium is very common. The sooty molds may occur as the result of an insect infestation. In Arkansas, sooty mold is commonly observed on the woody shrubs of crapemyrtle and gardenia. Dogwood, tulip tree and pecan also tend to develop this problem frequently during the warm and humid months of May and June (Figure 1).

Symptoms

The visual evidence of sooty mold usually becomes quite noticeable to the home gardener during August and September. Initially, leaves develop a sticky and shiny film on their surfaces (Figure 2). This sticky, clear film is actually the honeydew of aphids and other insects that serves as a food source for the growth and development of the sooty mold group of fungi. The fungal growth appears as irregular black crusts or mats, usually on the upper surfaces of leaves. Gardenia plants tend to readily develop sooty mold as a result of heavy insect feeding (Figure 3). The fungal growth may become thick so as to resemble a thin, black sheet of tissue paper on the leaf. This layer may actually interfere with light absorption by the plant, thus producing a stress condition. Again, the presence of sooty mold may indicate significant insect activity.

Figure 1. Sooty mold on dogwood leaf.

Figure 2. Honeydew on crapemyrtle.

Figure 3. Insects and sooty mold on gardenia.
Life Cycle

The fungi responsible for sooty mold do not penetrate plant tissues but merely grow on the plant surface. This growth creates a dark brown to black fungal layer or mat on the plant. These fungi often get their primary nutrition from the clear, sugary insect secretions (honeydew) on plant surfaces. Wind-blown spores of the fungus germinate on the honeydew and produce fungal threads (mycelium) that spread over the plant surface. Moist and warm weather conditions usually intensify sooty mold activity. Insects, such as aphids, scale, whiteflies and leafhoppers, are often the source of the sugary honeydew on which the sooty mold grows.

Management

Sooty molds are easily diagnosed by the home gardener. The black mycelial growth of sooty mold can be simply wiped off the leaf or stem with a moistened paper or cloth, leaving clean and healthy tissue below.

Since sooty molds often grow on the excretions of insects, control is based on controlling insect pests with an appropriate insecticide. Insects may be on or above the affected plant. The black layer can be physically removed by washing the plant with dilute soap solution; however, if the insect pests are not controlled, sooty mold will soon reoccur.