

Cornell University College of Agriculture and Life Sciences

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Sooty Molds: various

Introduction

Sooty mold is a charcoal black fungus that appears as a black coating on the surface of leaves, fruits, twigs and branches of many deciduous and evergreen shrubs and trees. This fungus is not pathogenic to plants but obtains its nourishment from insect honeydew.

Symptoms and Signs

Honeydew is a sweet, clear, sticky substance secreted by insects such as aphids, mealybugs, scale, and whiteflies. The honeydew drops from the insects to the leaves and twigs. Wind-blown sooty mold spores that stick to the honeydew then have a suitable medium for growth. When spores germinate, they send out black fungal strands (mycelium) that covers the plant tissue and causes the discoloration. A heavy layer of black mold may build up on needles (**Fig. 1**) and on twigs (**Fig. 2**) over more than one growing season. On leaves, this coat of mold screens out light and reduces the plant's capacity to produce food. On some trees no obvious damage may be apparent.



Figure 1: Heavy build-up of Sooty Mold on needles

Shrubs under trees that are heavily infested with honeydew producing insects may be seriously damaged or killed because the leaf chlorophyll cannot function properly under the thick layer of sooty mold that develops. Azalea, Rhododendron, Pieris, Cotoneaster, holly and other low-growing shrubs, growing under shady conditions are susceptible to serious damage.



Figure 2: Sooty Mold on a branch.

Management Strategies

In some cases, fresh sooty mold may be washed off of plants, but unless the causal insects are controlled, it may reappear. To prevent sooty mold, you need to manage the insects. The insects involved are small and may be present in large numbers before the black strands of sooty mold appear. Trees and shrubs should be observed frequently during the growing season for honeydew and insects. Remember -- look for insects not only on the affected plants--but on over-story plants as well for evidence of an infestation when sooty mold appears. At the first sign of aphids, mealybugs or whiteflies an appropriately registered insecticide may be used. If scale insects are present however, proper identification of the scale pest may be required, and you may need to consult your county agricultural agent or professional arborist for the proper time to spray that pest in your area.

Many pesticides may be registered to treat different pests on different plant(s) or groups of plants and in different sites. Always make sure the pest and the plant(s) to be treated are listed on the pesticide label. The label also contains information on how to apply the pesticide as well as any precautions. Follow the label instructions for any pesticide used.

For commercial applications, please refer to the appropriate commercial pest management guidelines, or contact your local Cooperative Extension Office for more information on currently registered products.

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READ THE LABEL BEFORE APPLYING ANY PESTICIDE! Changes in pesticide regulations occur constantly. All pesticides distributed, sold, and/or applied in New York State must be registered with the New York State Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide use in New York State should be directed to the appropriate Cornell Cooperative Extension Specialist or your regional DEC office.

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