

## BLACK SOOTY MOLD

### Symptoms

A sooty, gray-black and velvety, often crust-like coating may develop on the leaves, needles, fruits and branches of certain plants. The coating is actually the growth of one of several species of black-colored fungi or molds. The coating can be removed easily by rubbing the leaf between the fingers, thus exposing the green leaf tissue below.

Sooty molds grow only on the plant surface and will not kill plants. In fact, sooty molds often grow on sidewalks or fences under infested trees. Sooty molds are normally considered to be a cosmetic or aesthetic problem. In extremely severe cases, it is possible for the black growth to block enough sunlight to interfere with photosynthesis. In such cases, leaves, needles, fruits and new shoots may be smaller or less intensely colored. Respiration can be reduced through the physical closure of stomates by the vegetative growth of the molds. Under drought conditions, plants affected with sooty mold will wilt more rapidly than unaffected plants. If plant vigor has been reduced, the plant may also be predisposed to further injury by other insects, diseases or environmental stresses.



### Insect Association

Sucking insects are the primary cause of sooty mold growth. Many sap-sucking insects feed on leaves and stems of trees and shrubs, often producing excessive, watery excrement rich in sugars. This excrement is called honeydew. Excreted honeydew often falls on leaves or needles, branches, fruits or anything else immediately underneath the infested area of the plant. It is on this honeydew that the sooty mold fungi grow. Plants not actually infested by insects may be affected if a tree above them is being attacked by a honeydew producing insect and the honeydew drops onto the lower plants.

Aphids, soft scales (magnolia scale, lecanium scale, cottony maple scale, pine tortoise scale), mealybugs, whiteflies, leafhoppers, planthoppers and psyllids all produce honeydew. Occasionally, the spittle-like froth produced by spittlebugs promotes the growth of sooty molds as well.

### Susceptible and Resistant Trees

Plants that are commonly infested by the insects mentioned above are often hosts to sooty molds. Resistance to this condition is normally a result of resistance by the plant to honeydew producing insects.

## Control

Control sooty molds by controlling the honeydew producing insect. Consult the Horticare Factsheets on [aphids](#) and [scales](#) for cultural control recommendations for these specific insect pests. A strong spray of water can be used to dislodge the mold growth from many plants. For most plants, adding a mild soap or detergent solution (one teaspoon per gallon) will aid in cleaning the leaves. Some plants may be damaged by soaps--test for damage on a small area of foliage if unsure by spraying a small area and waiting a week to see if damage is evident.

## Plants Commonly Infested with Sooty Mold Diseases

*Abies* spp. (Fir)  
*Acer* spp. (Maple)  
*Ailanthus altissima* (Tree of Heaven)  
*Alnus* spp. (Alder)  
*Amelanchier* spp. (Serviceberry)  
*Asimina triloba* (Pawpaw)  
*Camellia* spp. (Camellia)  
*Carya* spp. (Hickory)  
*Catalpa* spp. (Catalpa)  
*Citrus* spp. (Orange, Lemon)  
*Cornus* spp. (Dogwood)  
*Cottoneaster* spp. (Cotoneaster)  
*Crataegus* spp. (Hawthorn)  
*Diospyros* spp. (Persimmon)  
*Fagus* spp. (Beech)  
*Fraxinus* spp. (Ash)  
*Ilex* spp. (Holly)  
*Juglans* spp. (Walnut)  
*Juniperus* spp. (Juniper)  
*Lagerstroemia indica* (Crape-myrtle)  
*Liriodendron tulipifera* (Tuliptree)  
*Ligustrum* spp. (Privet)  
*Magnolia* spp. (Magnolia)  
*Malus* spp. (Apple and Crabapple)  
*Myrica* spp. (Bayberry)  
*Philadelphus* spp. (Mockorange)  
*Picea* spp. (Spruce)  
*Pinus* spp. (Pine)  
*Platanus* spp. (Planetree)  
*Populus* spp. (Poplar)  
*Prunus* spp. (Cherry, Plum, Peach)  
*Pseudotsuga menziesii* (Douglas Fir)  
*Pyrus* spp. (Pear)  
*Quercus* spp. (Oak)  
*Rhamnus* spp. (Buckthorn)  
*Rhododendron* spp. (Rhododendron and Azalea)  
*Rhus* spp. (Sumac)  
*Salix* spp. (Willow)

*Sassafras* spp. (Sassafras)  
*Sorbus* spp. (Mountain Ash)  
*Staphylea trifolia* (American Bladdernut)  
*Thuja* spp. (Arborvitae)  
*Tilia* spp. (Linden)  
*Viburnum* spp. (Viburnum)

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