



RI Department of Environmental Management

Scale Insects and Black Sooty Mold – October 2012

Overview

Rhode Island experienced a large number of scale insects in the landscape this spring and summer. DEM believes that a species of scale insect known as black-banded lecanium scale, or *Mesolecanium nigrofasciatum*, has caused the black, sticky oily substance that has been found on exterior surfaces of homes, outdoor furniture and decks, and fences in certain neighborhoods in Coventry and other areas in the state.

Black sooty mold is an organic substance that is commonly found in nature as a gray-black and velvety, often crust-like coating that may develop on shrubs and trees that are infested with sap-feeding scale insects, or on underlying objects. The black sooty mold grows on the sticky “honeydew” secretions that come from the scale insects. Sooty molds do not kill plants as they grow on the surface of the plants.

When did DEM first get reports of this problem?

The DEM first received citizen complaints regarding this problem during the summer of 2011. The complainants in the North Woods and West Wood Estates neighborhoods in Coventry were concerned that nearby asphalt plants were the source of the black substance.

What has DEM done to investigate this?

The DEM (and the Town of Coventry under a cooperative agreement with DEM during 2011) has responded to numerous citizen complaints. The DEM received five samples provided by a citizen in the North Woods neighborhood of Coventry and had the samples tested. The sample results indicate all natural substances. The DEM additionally evaluated testing results of independent samples taken and analyzed. All observations of the black substance combined with sampling results point to a natural occurrence. The University of Rhode Island concurs that the black, sticky substance that has so many homeowners complaining is a result of natural occurrences. Sooty mold grows on the excrement of scale insects feeding on local trees. Beginning last year and continuing this year, scale insects have had a population explosion. The good news is that there are reports of a fungus that is killing the scale insect.

Is this only a problem in Coventry?

No. Observations of unknown black material on exterior surfaces have been received statewide including, but not limited to, West Greenwich, Richmond, Charlestown, Exeter, Johnston, Smithfield and Barrington. State inspectors have observed a similar black substance on surfaces throughout the state. The damp, humid summer has provided a vast breeding ground for a variety of mold, fungi and mildew. The sooty mold problem is not confined to Rhode Island, as it is being found nationwide.

Why does this black substance only appear in certain neighborhoods? If it's insect infestation, wouldn't it be seen in every neighborhood?

Not necessarily. While the problem has mainly been found in heavily treed areas, the insect is attracted to certain tree types, such as maple, beech, ash, spruce, pine, poplar and oak. See the URI Greenshare Fact Sheet for more information on trees and shrubs.

I thought mold only grows in shady areas. Why is this black substance showing up in the sunny spots in my yard?

Molds can grow wherever damp conditions occur.

Is this problem related to the operation of asphalt plants in Coventry?

The DEM does not believe that the asphalt plants are the source of the black substance in the North Woods and West Wood Estates neighborhoods given the distance from the plants and the direction of prevailing winds. Asphalt plants have been in operation at the Airport Road location since 1977. Recent inspections of the asphalt plants have not uncovered any deficiencies. Sampling results point to natural causes.

How do you clean the substance?

Sooty mold is particularly difficult to remove. Reports of successful cleaning options include scrubbing areas with a solution of 1 cup of borax mixed with a gallon of water and using a mixture of 1 cup of bleach mixed with a gallon of water. Be sure to use rubber gloves when using cleaning solutions. Care must be taken whenever chemicals are utilized, as damage to nearby plants may occur.

What health impacts can this cause to my family?

While there does not appear to be a correlation between sooty mold and health complaints, individuals with mold sensitivity may experience allergy symptoms if exposed to dense colonies or continued exposure to molds in the environment.

Resources

Questions about black sooty mold may be directed to URI Cooperative Extension Service, Plant Protection Clinic, Heather Faubert at (401) 874-2967 and Rosanne Sherry at (401) 874-2929.

Questions about health-related impacts from sooty black mold may be directed to the Department of Health Information Line at: 401-222-5960: Monday - Friday: 8:30 AM - 4:30 PM

URI GreenShare Factsheet—Sooty Molds on Trees & Shrubs
<http://www.uri.edu/ce/factsheets/sheets/sootymoldstreets.html>

URI GreenShare Factsheet—Scale Insects
<http://www.uri.edu/ce/factsheets/sheets/scales.html>

The Ohio State University Fact Sheet—Lecanium Scales in Ohio Landscapes
<http://bugs.osu.edu/bugdoc/Shetlar/factsheet/ornamental/Lecaniumscales.PDF>

Penn State Entomological Notes—European Fruit Lecanium
<http://bugs.osu.edu/bugdoc/Shetlar/factsheet/ornamental/Lecaniumscales.PDF>