

Cottony Camellia Scale

By Ray Novitske, Fairfax Master Gardener

When we see the term cottony camellia scale, we concentrate on the first two pleasant words “cottony” and “camellia.” They evoke ideas of something comforting and beautiful. But this scale insect that attacks our ornamentals at this time of year is anything but that.

Scale insects are small and do not appear like most other insects since they have no visible legs, heads or wings. There are over 150 types of scales in Virginia that take a liking to trees and shrubs. They are oblong immobile insects that usually park themselves on branches and twigs and feed on a plant’s sap, reducing its strength and health. The cottony camellia scale is no exception.

First, this is not a scale that attacks only camellias. I have seen it on hollies more than any other plant, but it also likes English ivy, yews, euonymus, hydrangea, maples and rhododendrons, in addition to the plant it is named for. In low numbers, the scale does little damage to the plants, But in higher infestations, the plant can end up weakened, its growth stunted, and more susceptible to disease. Because they are so small with adults being less than 1/8 inch long, they can build up large populations before they are noticed.



photo: Oregon State University

Cottony Camellia scale egg sacs on underside of leaf

photo: Ken Gray Insect Image Collection



Magnified view of scale on leaf vein

The most visible signs of cottony camellia scale (*Pulvinaria floccifera*) are the cottony egg sacs found at this time of year. These egg masses are laid by the females on the underside of leaves. Once hatched in May and June, crawlers emerge and are most active and mobile at this stage. Once finding a good spot on the twig or branch, they start sucking out plant juices and eventually lose their legs. As they mature, they develop a waxy coating on their outer bodies to help protect them.

The damage to plants may go unnoticed if the cottony camellia scales are low in numbers. One sign of the damage might include foliage that turns pale green or yellow. Some leaves may develop black

spots where sooty mold begins to show up from the scale’s droppings.

The scales develop through the summer and overwinter on twigs and branches. They emerge in spring with adult females laying their eggs. The good news is that there is only one generation per year.

There can be many generations in low numbers on ornamentals for several years with no decline in the plants being noticed. Look on the underside of plants for the telltale cottony egg sacs, or for black sooty

mold developing. Populations can remain in check by various parasitoids for years, but these have not been shown effective as a treatment.

Timing is everything in control of this insect. Control is best applied when scales are hatching and are very young in the crawler stage. Spray dormant horticultural oil in the spring season before females begin laying eggs in May. This will smother the adults, crawlers and any eggs.

Use insecticidal soap early in the life cycle when the scales are in the crawler stage, usually in the beginning of June. Chemical insecticides like Imidacloprid (which is a neonicotinoid), Permethrin and Carbaryl, as well as less harsh Neem Oil and Spinosin can be used. Insecticides will have little effect once reaching the adult stage, and there are no consistently effective biological controls available.

It is important to remember that cottony camellia scale can be tolerated with no noticeable damage to the plant. It is when their populations become large and the plant strength is reduced that they need control.

References

- [Home Grounds & Animals](#), Table 4.5, Virginia Cooperative Extension
- [Scale Insects](#), Eric Day, Virginia Cooperative Extension
- [Cottony Camellia Scale — Shrubs](#), University of Maryland Extension
- [Camellia Diseases & Insect Pests](#), Clemson Cooperative Extension, Home & Garden Information Center, Clemson University
- [Camellia — Cottony camellia scale](#), Pacific Northwest Insect Management Handbook



Sooty mold on non-infected leaves

photo: University of Maryland Extension