

INSECTS

Brian Kunkel Ornamental IPM Specialist

We have three common cottony scales that include cottony maple scale, cottony maple leaf scale and cottony camellia/taxus scale. To identify the species simply identify the host plant.

Cottony camellia/taxus scale (Pulvinaria floccifera) is the most commonly reported *Pulvinaria* soft scale. In the early spring, this small oval tan colored scale produces copious amounts of honeydew. It is frequently found on hollies, sweet box, Hvdranaea, Rhododendron, Cephalotaxus, and its namesake hosts. After the female lays her eggs in the cottony mass, she dries up - leaving only the cottony egg mass on the leaf. Crawler activity occurs over a wide time period: 145 - 1365 (830 peak) GDD_{50} . We are on the early side of crawler emergence. Peak crawler emergence should be in a week to ten days, depending on temperatures and specific microclimates.

Cottony maple scale (*Pulvinaria innumerablis*) favors silver maple and hickory, however they also may be found on other plants such as red maple, other maples, dogwood, birch, elm and willow. The crawlers are active from 462 - 2362 (1388 peak) GDD₅₀. The adults and eggs are almost always found on stems and branches, with crawlers settling on leaves for the summer until they migrate back to the stems to overwinter as female scales. Egg masses may contain greater than 1,000 eggs.

Cottony maple leaf scale (Pulvinaria acericola) occurs on many plants, but is most often observed on maples, dogwoods, black gum, and *Pieris*. Adults and egg masses are found all over the plant, but usually on the leaves. This is the least common of the three species.

(Continued)

DISEASES

Nancy Gregory **Plant Diagnostician**

ROSE DOWNY MILDEW caused by the oomycete Peronospora *sparsa* occurs sporadically, and all roses are susceptible. The symptoms are dark spreading leaf spots bordered by the veins. The production of sporangia on the lower surfaces of leaves is sparse. Spots are usually first seen at the tops of plants, yellowing will follow and leaves will drop. The pathogen is an obligate parasite, and only goes to rose. Downy mildew is favored by cool temperatures and high humidity. Inspect all new plants when purchased, as sanitation and avoiding downy mildew is far easier than controlling it. Phosphorus acids salts fungicides may be effective.

(Continued)

UNIVERSITY OF DELAWARE

Issue 11

What's Hat

Turf lawns are still showing red thread symptoms, and some dollar spot is showing up. A soil test may be warranted.

Sycamore anthracnose is defoliating many mature trees. The weather has been favorable for anthracnose and leaf spot diseases. Use fungicides now to control peony blotch, and keep up with sprays for apple scab.

Insects (Continued)

Many predators and parasites feed on these scales and control them. Treatments targeting crawlers are most efficacious. Horticultural oil, insect growth regulators (Distance or Talus), neonicotinoids, insecticidal soap, abamectin, and pyrethroids are options.



Downy mildew on rose. Photo credit: N. Gregory.

COOPERATIVE EXTENSION

on pests & practices covered in this newsletter, call your County Extension Office

Helpful numbers to know:	
Garden Line	831-8862
(for home gardeners only)	
New Castle County Extension	831-2506
Kent County Extension	730-4000
Sussex County Extension	856-7303
View more pictures at http://ex edu/ornamentals/archive/	tension.udel.

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Diseases (Continued)

SHOT HOLE LEAF SPOT ON PRUNUS SP. also called Coryneum blight is caused by the fungus Wilsonomyces, and occurs on apricots, cherries, plums, nectarines, and peaches. This leaf spot is more common in Western states but was recently detected on new container fruit tree stock in Delaware, and is favored by wet weather during winter and spring. Shot hole first appears as purple or reddish spots on new buds, leaves, and shoots, with a narrow, vellow margin. Spots expand and their centers turn brown and drop out, leaving holes. The fungus also causes leaf drop, scabby lesions on fruit, and small cankers on branches. Spores, visible with a hand lens, form in the center of brown spots, distinguishing this spot from bacterial shot hole. The fungus overwinters in infected buds and twigs, and spores are spread in the spring in splashing water. Prune and dispose of affected branches. On high-value plants, fungicides such as chlorothalonil may help to manage.



Shot hole leaf spot on nectarine. Photo credit: N. Gregory.

Editor: Susan Barton Extension Horticulturist

Swarthmore College (Delaware County, PA) = 601 ('16 =596) (New Castle County) = 618 ('16 = 562) Fischer Greenhouse Research & Educ. Center, Georgetown лезеали « синс. сешег, осогден (Sussex County) = 776 ('16 = 635) AS OF May 30, 2017



Cottony camellia scale close up. Photo credit: B. Kunkel



Cottony maple scale close up. Photo credit: B. Kunkel