

# ORNAMENTALS

• H O T L I N E •

June 7, 2019

Issue 11

## INSECTS

Brian Kunkel  
Ornamental IPM Specialist

**COTTONY SCALES.** Earlier in May, the *Pulvinaria* scales produced their ovisacs, and *P. floccifera* crawlers started moving on the underside of leaves. The *Pulvinaria* scales are noticeable because of their cottony ovisacs. We have three common cottony: cottony maple scale, cottony maple leaf scale and cottony camellia/taxus scale. To identify the species, identify the host plant.

Cottony camellia/taxus scale (*Pulvinaria floccifera*) is the most commonly reported. In the early spring, this small oval tan colored scale produces copious amounts of honeydew as it feeds. This species is frequently found on hollies, sweet box, *Hydrangea*, *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 long time: 145-1365 (830 peak) GDD<sub>50</sub>.

Cottony maple scale (*Pulvinaria innumerabilis*) favor silver maple and hickory, however they also may be found on red maple, other maples, dogwood, birch, elm, willow and others. The crawlers are active from 462-2362 (1388 peak) GDD<sub>50</sub>. 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 submitted into the extension offices. (Continued)

## DISEASES

Nancy Gregory  
Plant Diagnostician

**ELM LEAF SPOTS** are noticeable this season. Fungal leaf spot, also called black spot or anthracnose is caused by the fungus *Gnomonia ulmea* which affects elm and *Zelkova*. The fungus is widespread in Delaware and the Mid-Atlantic states and overwinters in buds and on fallen leaf debris. In spring, spores are produced in fruiting bodies, and spread during rainy conditions to establish new infections. Spores germinate under moist conditions, infect young leaves and produce small, round, yellow spots as leaves unfurl. Spots darken and become raised on the surface. When numerous developing spots are present, they coalesce to form large blotches surrounded by white dead tissue. Symptoms also develop on petioles and twigs, but first appear in the lower canopy. Anthracnose can cause premature defoliation (Continued)

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## What's Hot!

Herbicide injury from lawn chemicals applied before heavy rains has been noted in landscapes on hydrangea and other shrubs.

Thielaviopsis root rot and Pythium root rot infect bedding plant annuals, especially in wet sites. Discard affected plants.

### Insects (Continued)

Many predators and parasites feed on these scales, which helps keep their populations in check. Dormant oil treatments may provide some control; however, treatments targeting crawlers are more efficacious. Horticultural oil, insect growth regulators (Distance or Talus), neonicotinoids, insecticidal soap, abamectin, and pyrethroids are other options.



Cottony camellia scale. Photo credit: B. Kunkel

For more information

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

Helpful numbers to know:



Garden Line (for home gardeners only) 831-8862

New Castle County Extension 831-2506

Kent County Extension 730-4000

Sussex County Extension 856-7303

View more pictures at <http://extension.udel.edu/ornamentals/>

## Diseases (Continued)

early in the growing season. Like most anthracnose fungi, the pathogen goes dormant during summer and trees will put out a second flush of leaves, but secondary infection by asexual spores continues as long as conditions remain wet. Elm anthracnose can cause serious defoliation of susceptible trees in wet years and is especially severe in areas where cool, moist weather is common in the spring and early-summer.

DUTCH ELM DISEASE is very different, a true vascular wilt disease caused by the fungus *Ophiostoma ulmi* and vectored by a small beetle. Symptoms include yellowing and flagging of branches up high in the canopy and an overall thinning of the crown. Anthracnose affected branches in the canopy appear like flagging from Dutch elm disease.

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Editor: Susan Barton  
Extension Horticulturist



Elm black spot (anthracnose) caused by the fungus *Gnomonia*.  
Photo credit: N. Gregory

**GROWING  
DEGREE DAYS**  
AS OF June 4, 2019

- Swarthmore College  
(Delaware County, PA) = 800 ('18 = 714)
- Fischer Greenhouse  
(New Castle County) = 842 ('18 = 738)
- Research & Educ. Center, Georgetown  
(Sussex County) = 955 ('18 = 911)