

ORNAMENTALS

• H O T L I N E •

INSECTS

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Issue 22

Brian Kunkel
Ornamental IPM Specialist

TULIPTREE AND MAGNOLIA SCALES: Tuliptree scale and Magnolia scale are two difficult to distinguish from one another soft scales. Host plant preference doesn't work because both of these are frequently found on tuliptree and magnolia. One difference is that tuliptree scale occasionally feeds on lindens, and magnolia scale on Virginia creeper. Both species overwinter as second instars and resume feeding in the spring. Their feeding results in copious amounts of honeydew and sooty mold from July through August.

Crawlers could be active now and we have not reached the peak activity for them yet based on growing degree days. They are one of our largest soft scales and only have one generation per year. Ants, wasps, flies, and bees are examples of insects that might be seen on or around infested trees since they frequently take advantage of the sugar-filled honeydew as an energy resource. Female tuliptree scales are grayish-green to pinkish-orange mottled with black and their crawlers are active from 2016 to 3212 [2860 peak] GDD₅₀. Female magnolia scales are pinkish-orange to brownish, smooth and are often covered with a white mealy wax until their crawlers emerge starting around 2075 to 3247 [2746 peak] GDD₅₀. To scout for crawler activity, place double-sided sticky tape around branches with swollen females producing honeydew. The small dark-red colored crawlers become stuck on this tape when they try and crawl across it in search of new feeding sites. Weekly inspection and replacement when necessary will reveal when crawler densities are high.

Numerous natural enemies, including a predaceous caterpillar, attack both scale species but sometimes they are unable to keep scale populations suppressed. Horticultural oil, insecticidal soap, Distance (IGR) or Talus (IGR) are products available for controlling crawlers of both scales. Imidacloprid or other neonicotinoids are available for use but applications should be earlier in the summer so there is enough time for the product to move to the target areas of the plant. Tree injections of

DISEASES

(Continued)

Nancy Gregory
Plant Diagnostician

POWDERY MILDEW has been problematic this summer on many ornamental shrubs, including lilac, crape myrtle; and trees such as dogwood; perennials such as Monarda (bee balm) and phlox; and annuals such as zinnia. Powdery mildew fungi are usually very specific in the plants they infect, so one that causes disease on zinnia, will not affect dogwood and so on. Powdery mildew is named for the white powdery appearance due to sporulation of the fungus on the top surface of affected leaves. Powdery mildew

(Continued)

What's Hot!

Caterpillars were noticed feeding on the buds of potted geraniums. Some larvae feed on geraniums, but not many. Pick them off for simple control.

Dallisgrass is a difficult-to-control lawn weed and often requires multiple herbicide applications over several years.

Daylily leaf streak is noticeable on foliage. Cut back foliage on cultivars that have finished bloom and discard to reduce inoculum.

Insects (Continued)
emamectin benzoate, imidacloprid, or dinotefuran are other options, especially where traffic safety is a concern. Application of pyrethroids is another option if they are made during crawler activity; however, they frequently have a greater impact on the natural enemies.



Honeydew drop from 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	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://sites.udel.edu/ornamentals/>

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COOPERATIVE EXTENSION

Diseases (Continued)

can be found on the lower leaf surface sometimes, and symptoms may begin with chlorosis (yellowing) or reddish tones, mottle or uneven color, or distortion, curling or cupping of leaves. Although sometimes merely cosmetic, repeated infections of powdery mildew on perennial plants or landscape trees and shrubs may cause decline if it interferes with photosynthesis and the movement of nutrients. Late in the season, dark pinpoint fruiting bodies may be observed in some powdery mildews on the lower surface of leaves. These dark fruiting bodies survive the winter. Powdery mildew fungi are favored by high humidity. For management, rake up and discard leaves that fall, maintain trees and shrubs in good vigor, prune to keep good air circulation amidst plants, and water during times of drought. Prune back perennials in the very early spring to remove inoculum. Preventative fungicides may be an option for high value plants, but check labels and apply when symptoms are first observed next summer. Biorational products such as neem oil are generally not as effective. Resistant cultivars are available for new plantings of dogwood, lilac, and crape myrtle.



Powdery mildew on crape myrtle. Photo credit: N. Gregory

Editor: Susan Barton
Extension Horticulturist

**GROWING
DEGREE DAYS**
AS OF August 16, 2016

- Swarthmore College
(Delaware County, PA) = NA ('15 = 2589)
- Fischer Greenhouse
(New Castle County) = 2583 ('15 = 2596)
- Research & Educ. Center, Georgetown
(Sussex County) = 2676 ('15 = 3192)



Magnolia scale. Photo credit: B. Kunkel