

# INSECTS

Brian Kunkel Ornamental IPM Specialist

JAPANESE MAPLE SCALES are common and feed on plants from 45 different genera (27 families) and include plants such as: *Acer, Cornus, Euonymus, Ilex, Ligustrum, Magnolia, Malus, Prunus, Rosa, Syringa, Ulmus* and *Zelkova* among others. This armored scale is difficult to control because it has an extended crawler activity period (8 – 10 weeks), two generations a year and is small. Infestations will cause dieback and eventual plant death.

This armored scale is long, thin, irregularly oyster-shaped, and has a white waxy covering over a dark brown skin. Males and females look similar. When the covering is removed, immature scales and females have a light purplish color. Crawlers are also light purple and settle relatively quickly (usually within hours of emerging). This scale is most often found settled on the bark of branches, twigs and trunk of the host; however heavy infestations may have them on foliage. Recent research at the University of Maryland found there are two generations, with the first beginning at about 806 GDD<sub>50</sub> and continuing for about 7 weeks with a peak at  $1144 \text{ GG}_{50}$ . The second generation starts around 2220 GDD<sub>50</sub> and continues about 8 weeks with a peak at 3037 GDD<sub>50</sub>. Research from the efforts of Penn-DEL IPM group found crawler activity of one generation 695-1973 [846 peak] GDD<sub>50</sub> and I found additional activity 2260 - 2450 GDD<sub>50</sub> which probably continued longer.

Scouting for this pest is important to time applications. Crawler activity will occur soon; thus now is a good time to scout the hosts. Infestations should be sampled prior to applications to inspect for parasitoid activity. The covers of this armored scale remain for a time and can appear unsightly. Successful control can be obtained with horticultural oil, insecticidal soap, insect growth regulators (Distance or Talus), clothianidin or dinotefuran. Tank mixing horticultural oil (0.5%) with the Distance also seems to improve their coverage and efficacy. Tank mixing Talus and horticultural oil may clog nozzles.

## DISEASES

Nancy Gregory Plant Diagnostician

DOLLAR SPOT on turfgrass appears as clusters of tan spots about the size of a half dollar or about 4 cm or larger. Spots can then coalesce. Initial yellow light green spots bleach out to a light straw color, and mycelium may be seen on the grass blades, especially in the morning. Symptoms of dollar spot may be similar to those of brown patch and Pythium blight in the summer, but there are differences. Dollar spot is caused by the fungus Sclerotinia, and is

### (Continued) UNIVERSITY OF DELAWARE •

What's Hot!

Plum and peach trees are susceptible to a fungal disease called black knot, causing dark swellings along the twigs. The fungus may overwinter in cankers on the main branch or trunk. Prune out and remove the affected wood from the property to remove the fungus. Fungicides are usually not effective on black knot.



Japanese maple scale. Photo credit: B. Kunkel

more

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://sit ornamentals/	tes.udel.edu/

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#### Diseases (Continued)

common in the summer when temperatures are above 80 F and there is high humidity. Dollar spot can be severe on turf that is low in nitrogen, but fertilizer is usually not recommended in the summer months. A very light application of nitrogen in the late spring may help for turf with a history of dollar spot. Sclerotinia will not completely kill the turf, as it affects the blades and not the crowns, so dollar spot may not be a continuing problem with some cultural management strategies. Sclerotinia does not produce spores, but is spread as mycelium by wind, water, equipment, and shoes. The fungus produces resistant dark sclerotia that help it survive over the winter and during dry periods. Cultural controls include removal of thatch, avoidance of water on blades late in the day, and resistant turf cultivars. Chemical control includes specific fungicides such as DMI's or SDHI's, rotated with contact fungicides to help avoid resistance development.

> Editor: Susan Barton Extension Horticulturist



Dollar spot on turfgrass. Photo credit: G. Clouser



Dollar spot on turfgrass. Photo credit: G. Clouser

Swarthmore College (Delaware County, PA) = 2159 ('15 = 2247)
Swarthmore College (Delaware County, PA) = 2167 ('15 = 2267)
Fischer Greenhouse (New Castle County) = 2167 ('15 = 2361)
Research & Educ. Center, Georgetown (Sussex County) = 2267 ('15 = 2361)