

ORNAMENTALS

• H O T L I N E •

INSECTS

June 21, 2019

Brian Kunkel
Ornamental IPM Specialist

JAPANESE MAPLE SCALES are common in landscapes and nurseries and feed on plants from 45 different genera (27 families) including: *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. The first generation crawlers are actively moving on hosts now.

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 are 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 GDD₅₀ and continuing for about 7 weeks with a peak at 1144 GG₅₀. The second generation starts around 2220 GDD₅₀ continuing about 8 weeks with a peak at 3037 GDD₅₀. Research from the Penn-DEL IPM group found crawler activity of one generation 695-1973 [846 peak] GDD₅₀ and I found additional activity 2260-2450 GDD₅₀, which probably continued longer.

Scouting is important to time applications appropriately. Sample infestations prior to applications to detect parasitoid activity. The covers of this armored scale remain for a time and can

(Continued)

DISEASES

Nancy Gregory
Plant Diagnostician

BOTRYOSPHERIA CANKER AND TWIG DIEBACK is common on redbud, dogwood, and maple. Wilting, flagging and dieback of branches occurs before branch cankers. *Botryosphaeria* has a wide host range, is an opportunistic fungus, and comes in on wounds and stressed plants. Conditions that favor *Botryosphaeria* are warm wet weather, and spores are spread by rain splash or irrigation. Sanitation plays a key role in management. Pruning can also be a source of wounds, so proper pruning is important. Prune when conditions are dry, cleaning pruners between cuts. A fungicide used after pruning may be helpful, and research (A. R. Chase) has shown that a broad spectrum strobilurin such as azoxystrobin, or thiophanate methyl rotated with a combo of pyraclostrobin and boscalid may be effective. Apply according to label.

(Continued)

Issue 13

What's Hot!

Botrytis on flowering annuals occurs on spent blooms. Deadhead regularly.

Japanese beetle adults are starting to emerge.

Watch/inspect for spotted lanternfly nymphs! They are becoming larger and are black with white polka dots

Insects (Continued) 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 Distance seems to improve coverage and efficacy. Tank mixing Talus and horticultural oil may clog nozzles. Stanton Gill and I are conducting an efficacy trial with Altus, Talus and dinotefuran with all three products providing adequate control.



Japanese maple scale on dogwood. 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://extension.udel.edu/ornamentals/	

UNIVERSITY OF DELAWARE

COOPERATIVE EXTENSION

Diseases (Continued)

CERCOSPORA LEAF SPOT OF HYDRANGEA commonly occurs on most types of hydrangea but is also similar to leaf spot caused by the fungus *Septoria*. Leaf spot is promoted by wet and humid weather, and free water on leaf surfaces. It looks unsightly but will not affect long term health of plants. Management of fungal leaf spots includes clean-up of old diseased leaves and pruning of worst affected twigs. Pruning will also increase air circulation amidst the plants, so pruning after the first flush of flowers is a good practice. Mulch can help to reduce splash of spores. Fungicides are preventative and used in sites with a history of leaf spot, or high value specimen plants. Neem oil is a good choice for home gardeners.

Editor: Susan Barton
Extension Horticulturist



Botryosphaeria canker on flowering dogwood. Photo credit: N. Gregory

GROWING DEGREE DAYS
AS OF June 18, 2019

- Swarthmore College (Delaware County, PA) = 1096 ('18 = 1005)
- Fischer Greenhouse (New Castle County) = 1134 ('18 = 1014)
- Research & Educ. Center, Georgetown (Sussex County) = 1267 ('18 = 1128)



Japanese maple scale on red maple.
Photo credit: B. Kunkel



Botryosphaeria canker on redbud. Photo credit: N. Gregory