

# ORNAMENTALS

• H O T L I N E •

June 14, 2019

Issue 12

## INSECTS

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Ornamental IPM Specialist

LECANIUM SCALES are a category of soft scales we often find in the landscape. Fletcher scale, *Parthenolecanium fletcheri*, affects coniferous plants such as *Taxus*, arborvitae, junipers and bald cypress. European fruit lecanium, *Parthenolecanium corni*, will infest many broad-leaved woody plants such as redbuds, hawthorns, oaks and dogwoods. Oak lecanium, *Parthenolecanium quercifex*, feeds on oaks also. These scale species have similar periods of crawler activity in our area.

Fletcher scale crawlers are active from 310 - 1496 [896 peak] GDD<sub>50</sub> and European fruit lecanium crawlers are active from 590 - 1328 [877 peak] GDD<sub>50</sub>. Scout or monitor populations on plants you or your company manage. Crawlers are tiny yellowish orange dots and can be observed by striking foliage to a sheet of paper that dislodges unsettled crawlers. Double-sided tape can also be placed around stems near adults and periodically visited during the window of crawler activity. Crawlers settle on the undersides of needles or leaves and feed during the summer. In the fall, the nymphs migrate to stems to overwinter and resume growth in the spring to complete their life cycle.

Adult scales look like small round lumps or swollen areas on stems and branches. Soft scales feed on plant sap and their excrement, honeydew, drops onto anything below the feeding sites. Honeydew is a shiny, clear, sticky, sugary liquid that frequently attracts bees, flies, wasps and other insects, or has a black colored fungus called sooty mold growing on it.

There are a number of parasitoids that will attack lecanium scales; thus it is important to examine scales for tiny exit holes in the scale cover. Lady beetles and lacewings are generalist predators that will feed on adults or crawlers. Chemical control is best achieved during crawler activity and horticultural oil or

## DISEASES

(Continued)

Nancy Gregory  
Plant Diagnostician

GYMNOSPORANGIUM RUSTS have been more common in the landscape, with the telial stage of the fungus showing on juniper hosts and the aecial stage showing on pomaceous hosts, such as apple and pear. Telial structures are visible now on juniper. To manage, break the disease cycle by pruning out affected portions of juniper host plants where rust fungi overwinter. There is still time to prune. Teliospores germinate to form basidiospores, which are very small and easily carried on winds. Spores are carried to the alternate hosts in the spring where they cause leaf and fruit spots.

(Continued)

## What's Hot!

Japanese maple scale crawlers are active but not at peak activity yet for the first generation.

Leopard moths are actively flying.

## Insects (Continued)

insecticidal soap are good options. Talus and Distance are insect growth regulators available for control and Distance can be mixed with 0.5% horticultural oil for successful control. Neonicotinoids used as a drench need to be applied before crawler activity to provide time to get into the plant. Altus is another product available for control of this scale. Other products are available for control but may adversely impact natural enemy populations.



Oak lecanium 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/>

UNIVERSITY OF DELAWARE

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Diseases (Continued)

Cedar apple rust (*G. juniper-virginiana*) galls have been observed on Eastern red cedar this season. Cedar quince rust (*G. clavipes*) is observed as flat oval cankers on juniper twigs, with the spore production appearing as orange powder or ooze in the cracks in twigs. Cedar quince rust can be very damaging on apple and hawthorn later in the season. Cedar hawthorn rust (*G. globosum*) occurs on junipers as small galls and is common on the fruit of serviceberry (see photo). Japanese apple rust (*G. yamadae*) forms small gelatinous galls on *J. chinensis*, and causes leaf spots on apple and crabapple.

A new Gymnosporangium rust in the Mid-Atlantic is pear trellis rust, caused by *G. sabinae*. Pear trellis rust is found on leaves and fruit of pear, including callery pear, with small twig cankers on juniper. Protectant fungicide sprays can help to control rusts on apple, crabapple, quince, and hawthorn if applied during the infection period, through early May. Timing of labeled products is important. Do not plant apple, crabapple, hawthorn, and pear near juniper hosts.



Cedar hawthorn rust on serviceberry. Photo credit: N. Gregory

Editor: Susan Barton  
Extension Horticulturist

**GROWING DEGREE DAYS**  
AS OF June 11, 2019

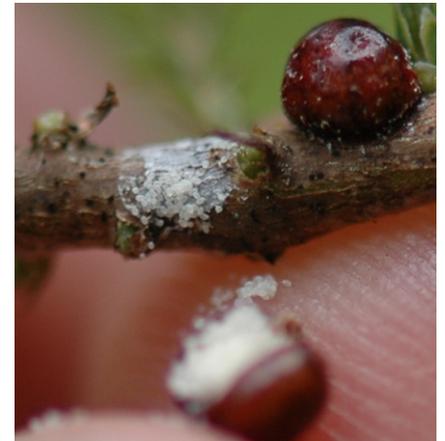
- Swarthmore College (Delaware County, PA) = 961 ('18 = 835)
- Fischer Greenhouse (New Castle County) = 995 ('18 = 844)
- Research & Educ. Center, Georgetown (Sussex County) = 1112 ('18 = 948)



Japanese apple rust on apple under a 12x dissecting scope. Photo credit: N. Gregory



Callery pear rust. Photo credit: N. Gregory



Lecanium scale eggs. Photo credit: B. Kunkel



Fletcher scale with mealybug destroyer. Photo credit: B. Kunkel