

INSECTS

May 31, 2019

Brian Kunkel Ornamental IPM Specialist

BAGWORM peak egg hatch has occurred throughout the state according to growing degree days, so look closely at host plants to notice early instars. Bagworms are caterpillars (Lepidoptera: Ps chidae) preferring to feed on juniper, arborvitae, and Leyland cypress, but will eat a variety of other deciduous and coniferous plants. Eggs typically hatch at 364 - 710 GDD50 (peaks at 580) and larvae are found feeding in the "dunce cap" stage. A subset of eggs usually hatch later in June because those eggs are in cooler microclimate areas. This can cause confusion about the number of generations in Delaware. There is one generation per year, but egg hatch typically occurs over three or four weeks.

Larvae feed 519–3041 GDD50 (1453 peak) or when *Viburnum dentatum* is in full bloom and begin to pupate around mid-August to early September. Search plants closely for larvae including interior sections of trees. Bags carried by early instars have the 'dunce-cap' appearance. Older larvae have bags that hang down. Scout plants near plants infested last year because the hatchlings disperse by ballooning on the wind to nearby plants.

Early applications (end of May) could miss late hatching eggs so continue to monitor treated plants. Applications in mid- to late-June target both early and late hatching larvae and provide control often with little damage. The amount of damage caused by small bagworms vaies with their ability to disperse from hatch sites and the quantity of early instars. Scouting and monitoring helps you detertmine when a spray is necessary.

Physically removing bagworms is one method of control; however this can get too labor intensive or impractical depending on the size of the plant or population. Companion plants encourage parasitoid presence to attack bagworm pupae. Pesticide applications targeting early instars are generally more effective than targeting larger bagworms. Products available for control (Continued)

DISEASES

Nancy Gregory Plant Diagnostician

PHYTOPHTHORA RAMORUM has been detected in rhododendrons in retail nursery stock in central Indiana, by Indiana Department of Natural Resources. The fungus like organism, *P. ramorum*, is the cause of ramorum blight on many species of plants such as rhododendron, camellia, viburnum, and other understory shrubs. It is the cause of death of mature oaks in California, leading to the name sometimes used of "sudden oak death". We have not detected *P. ramorum* in Delaware despite several years of surveys in cooperation with Delaware Department of Ag and USDA. There are many other diseases,

(Continued)

Issue 10

What's Hot!

Ash rust is still severe in our area, see last week's issue of Ornamentals Hotline. Symptoms will continue to develop and leaves will drop, but ash rust should not affect long term health of trees.

Hibiscus sawflies are active. Spinosad, insecticidal soap, pyrethroids are options for control if needed to manage populations.

Continue to scout for spotted lanternfly.

Emerald ash borer adults are flying.



Dunce cap stage. Photo credit: B. Kunkel

Insects (Continued)

include Acelepryn, Dipel, Confirm, Orthene, Tempo, Permethrin Pro, or other pyrethroids. Dinotefuran and clothianidin (less than dinotefuran) have demonstrated some bagworm mortality when applied as a soil application.

For more information

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

Helpful numbers to know:

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Garden Line (for home gardeners only) New Castle County Extension Kent County Extension

831-2506 730-4000 856-7303

831-8862

Sussex County Extension 856-7303 View more pictures at http://extension.udel. edu/ornamentals/

UNIVERSITY OF DELAWARE Continu

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Diseases (Continued)

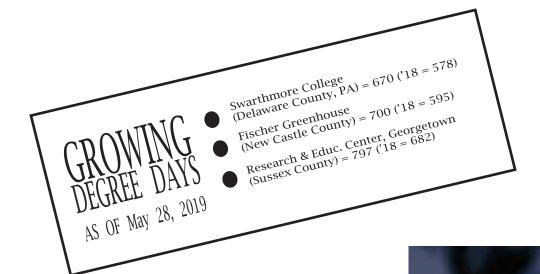
pests, and environmental problems that occur on broadleaved evergreens such as rhododendron. In a case like this, there will be a trace back to all nursery stock sold by the original nursery in the western U.S. Through vigilance we can protect our landscape plants in Delaware and the Mid-Atlantic.

FUNGAL BRACTS ON TREES such as *Laetiporus sulphureus*, the chicken of the woods, are appearing. Laetiporus, the sulfur shelf fungus, is a choice edible, most often at the base of trees near the ground, sometimes they are brackets higher on trunks of trees. These fungi usually enter through a wound, and cause heart rot, a very slow decline and the tree may live on for years. Rotting of interior wood can lead to breakage and invasion by insect pests. Reduce stress on trees and prune to remove dead wood. High moisture this year has brought out fruiting bodies earlier than the norm. As always, I recommend not eating anything that you do not have identified in person by an expert.



Chicken of the woods. Photo credit: N. Gregory

Editor: Susan Barton Extension Horticulturist



Ramorum blight on Rhododendon leaves. Photo credit: U GA