

ORNAMENTALS

• H O T L I N E •

INSECTS

June 8, 2018

Brian Kunkel
Ornamental IPM Specialist

BAGWORM peak egg hatch has already occurred throughout the state so closely observe host plants to notice the early instars. Bagworms are caterpillars (Lepidoptera: Psychidae) 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. 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. Eggs hatch until around the middle of June, depending on oviposition and microclimate. Search plants closely when looking for this stage and be sure to search interior sections of trees too.

Bags carried by early instars have the 'dunce-cap' appearance whereas older larvae have bags that hang down. Do not forget to scout plants near plants infested last year because the hatchlings disperse by ballooning on the wind to nearby plants.

Early applications made at the end of May could miss late hatching eggs so continue monitoring treated plants. Applications in mid- to late-June target both early and late hatching larvae and provide sufficient control often with little damage. The amount of damage caused by small bagworms can vary depending on their ability to disperse away from where they hatch and the quantity of early instars.

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 parasitoids to remain in the area to attack bagworm pupae. Previous research found that late season applications of Acelepryn (chlorantraniliprole) controlled bagworms as well as Orthene (acephate). Dipel (*B. thuriengensis* 'kurstaki'), Conserve

(Continued)

DISEASES

Nancy Gregory
Plant Diagnostician

FIRE BLIGHT is widespread on apple, crabapple, and pear (including flowering callery pear). The weather conditions since early spring have been wet and humid, conducive to movement of bacteria on water and wind, with suitable conditions for infection. Infection occurs on the new growth, older twigs and branches are not susceptible to new infections, but bacteria can reside in those older branches. Prune clean areas in orchards first. Then prune out affected areas in trees, pruning 12 inches below the affected area, cleaning pruners after each cut. Prune when weather has been dry for a few days, and remove clippings from the area.

(Continued)

Issue 12

What's Hot!

Botrytis blight on flowering annuals comes in on spent blooms and is favored by humidity and rainfall. Deadhead annuals and remove clippings.

Use of grass clippings as mulch can result in problems in garden beds if lawns have been treated with herbicides.

Lecanium scale crawlers should become active soon.

Insects (Continued)
(spinosad) and Acelepryn (chlorantraniliprole) are excellent products to apply around mid to late June for bagworm control while conserving the natural enemies feeding on bagworms such as wasps and parasitoids. Pesticide applications targeting early instars are generally more effective than targeting larger bagworms. Other products available include Confirm, Tempo, Permethrin Pro, or other pyrethroids. Dinotefuran and clothianidin (less than dinotefuran) have demonstrated some bagworm mortality when applied as a soil application.



Bagworms in dunce-cap stage. 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/>

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COOPERATIVE EXTENSION

Diseases (Continued)

Pesticides such as antibiotics, copper formulations, and plant growth regulators such as prohexadione calcium may help to manage fireblight in orchards.

RHODENDRON can begin once flowering has finished. Check for areas on branches with canker or dead shoots, these may be due to Phytophthora or Botryosphaeria. Prune affected branches out now to remove sources of inoculum for fungal pathogens.

CRAPE MYRTLE in our area suffered severe winter damage in areas exposed to temperature fluctuation and wind. Tops of shrubs remain dark and brown. Prune out, while maintaining the natural shape of the shrub. Winter damage was also noticeable on evergreens and some species did not produce as many cones (good for allergy



Fire blight on apple. Photo credit: N. Gregory

Editor: Susan Barton
Extension Horticulturist

GROWING DEGREE DAYS
AS OF June 5, 2018

- Swarthmore College (Delaware County, PA) = 717 ('17 = 714)
- Fischer Greenhouse (New Castle County) = 731 ('17 = 738)
- Research & Educ. Center, Georgetown (Sussex County) = 827 ('17 = 911)



Bagworm dunce-cap stage close up. Photo credit: B. Kunkel