

# ORNAMENTALS

• H O T L I N E •

## INSECTS

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Issue 12

Brian Kunkel  
Ornamental IPM Specialist

BAGWORM peak egg hatch has occurred throughout the state so close observation of host plants are now required for 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 GDD<sub>50</sub> (peaks at 580) and larvae are found feeding in the "dunce cap" stage. Larvae feed 519 - 3041 GDD<sub>50</sub> (1453 peak) or when *Viburnum dentatum* is in full bloom and begin to pupate around mid-August to early September. Eggs will hatch until around the middle of June, depending on oviposition and microclimate effects. Search plants closely when looking for this stage including interior sections of trees.

Bags carried by early instars have the 'dunce-cap' appearance, whereas 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 made at the end of May could miss late hatching eggs so continued monitoring of treated plants is a good practice. Applications in mid- to late-June targets both early and late hatching larvae and provides 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. Scout and monitor trees of concern to determine when a spray is necessary.

Control by physically removing bagworms; however this can get 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. thuriensis* 'kurstaki'), Conserve (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

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## DISEASES

Nancy Gregory  
Plant Diagnostician

BOTRYTIS blight or grey mold is common on flowers as they fade. It is caused by a hyphomycete fungus, *Botrytis cinerea*, which is more severe in extended periods of rain and clouds in the late spring and summer. It colonizes flowers, fruit, leaves of woody and herbaceous plants worldwide. Samples have been received from tomato, zinnia, and dahlia, starting off as a tan or brown lesion eventually turning gray with spores. High humidity allows

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## What's Hot!

Doug Tallamy is looking for bukmoths. They should be in oak trees or beginning to crawl across sidewalks, driveways, etc. as they begin to look for places to pupate. If you find them, contact Doug at dtallamy@udel.edu.



Bukmoth caterpillar. Photo credit: Jeffrey Pippin

### Pest and Beneficial Insect Walks:

June 14, 4-6 PM Sussex County Office

June 21, 4-6 PM UDBG, Newark

### Disease and Insect ID Workshop

July 19, 4-6 PM 012 Townsend Hall, Newark

<https://extension.udel.edu/lawngarden/commercial-horticulture/horticulture-short-courses/> for more info.

### Insects (Continued)

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.

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/archive/>

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## Diseases (Continued)

for further spread of the fungus. Clean up debris and promote good air circulation, and remove spent flowers and affected areas of the plant.

HOLLYHOCK RUST has been diagnosed on platter hibiscus in Newark. The rust caused by *Puccinia malvacearum* will occur on hollyhock, hibiscus and mallow. Rain, dew, and cool temperatures in the spring and fall provide conditions for rust diseases to develop and spread. Hollyhock rust usually does not kill the entire plant but will cause yellowing and early leaf drop, and is a bit unusual for rust diseases because it complete its life cycle on only one host. The rust fungus overwinters in infected plant debris and new spores are produced in the spring that infect new leaves. Sanitation and pruning of affected foliage along with fungicides will help to manage.

SLIME MOLDS have been seen on lawns due to wet weather and ample moisture. The yellow "dog vomit" slime mold is *Fuligo septica*, also called the scrambled egg slime mold. Another slime mold will coat grass blades with blue/black dusty material. Slime molds are not true fungi, but are often studied by mycologists. They appear rapidly, spread with alarming speed, but are often gone the next day as the plasmodium stage dries up. No control needed for these unique organisms that inspired the movie The Blob! Rake over them lightly, they are 90% water.



Botrytis on dahlia blossom.  
Photo credit: N. Gregory.

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Editor: Susan Barton  
Extension Horticulturist

**GROWING  
DEGREE DAYS**  
AS OF June 6, 2017

- Swarthmore College (Delaware County, PA) = 714 ('16 = 756)
- Fischer Greenhouse (New Castle County) = 738 ('16 = 739)
- Research & Educ. Center, Georgetown (Sussex County) = 911 ('16 = 814)



Dog vomit slime mold on lawn turf. Photo credit: N. Gregory



Bagworm in dunce cap stage. Photo credit: B. Kunkel



Rust on hibiscus. Photo credit: N. Gregory