

## **INSECTS**

Brian Kunkel Ornamental IPM Specialist

JAPANESE BEETLES are flying and feeding on various host plants including over 300 different types of broad-leaved plants. Some of the plants Japanese beetles prefer to feed on include roses, cannas, flowering crabapple, lindens, Norway and Japanese maples, and elms. Last year had enough rainfall for decent populations of Japanese beetles this year, which began to emerge in New Castle county about a week ago. Historically, adult activity occurs between 1094 - 2410 GDD<sub>50</sub>. This copper and green beetle skeletonizes plant foliage by feeding in between the leaf veins.

Many natural enemies attack the life stages of Japanese beetles such as: assassin bugs, parasitoids, ants, ground beetles, rove beetles, birds, skunks, and raccoons. To manage culturally, hand remove, remove previously beetle-damaged leaves, or shake beetles into buckets of soapy water. Research conducted by Stanton Gill and I found that Mainspring and Acelepryn provide excellent control of Japanese beetles as a foliar spray. Chemicals available for controlling adult beetles using insecticides include, Orthene, Sevin, Acelepryn (landscape uses) or one of the pyrethroids (e.g., cyfluthrin, deltamethrin, etc.). Insecticide applications may need to be made every 1 - 2 weeks when adult activity is high. Neem based products typically deter feeding for 3 – 4 days; applications should be before damage occurs. Imidacloprid can be applied for adult Japanese beetle control, but tolerance of some feeding is necessary. Wettable powder formulations of some pyrethroids (pyrethrins) may be more repellent than the EC formulations. Thorough treatment of target plants is needed for any of the listed products to effectively protect the plants. Insecticidal soaps, plant extracts, and companion plantings are generally ineffective.

## DISEASES

Nancy Gregory Plant Diagnostician

BOTRYTIS blight or grey mold is common on flowers as they fade. Grey mold is caused by a fungus, *Botrytis cinerea*, which is 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 for further spread. Management includes cleaning up debris and promoting good air circulation, as well as removal of spent flowers and affected areas of plants.

(Continued)

Issue 14

## What's Hot

Redheaded flea beetles are feeding on a variety of plants at nurseries and garden centers.

Bagworms should still be small enough to be susceptible to B.t. or spinosad applications (both more favorable to natural enemies).

The first generation of fall webworm may be found on host plants.

Keep watching for spotted lanternfly nymphs; they will larger black and white polka dotted insects and soon may start molting to the red black and white spotted nymph.

UD Ornamental Shortcourse Pest Walk Coming Up July 10 in Newark.



Botrytis on Dahlia blossom. Photo credit: N. Gregory

more ormation

COOPERATIVE EXTENSION

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://ext edu/ornamentals/	ension.udel.

## UNIVERSITY OF DELAWARE

Cooperative Extension Education in Agriculture and Home Economics, University of Delaware, Delaware State University and the United States Department of Agriculture cooperating, Michelle Rodgers, Director. Distributed in furtherance of Acts of Congress of March 8 and June 30, 1914. It is the policy of the Delaware Cooperative Extension System that no person shall be subjected to discrimination on the grounds of race, color, sex, disability, age, or national origin.

Reference to commercial products or trade names does not imply endorsement by University of Delaware Cooperative Extension or bias against those not mentioned.

Diseases (Continued) SLIME MOLDS occur on lawns and mulch 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, and are often gone the next day as the plasmodium stage dries up. No control needed for these unique organisms. Rake over them lightly, they are 90% water.

> Editor: Susan Barton Extension Horticulturist



Japanese beetle adults and damage. Photo credit: B. Kunkel

.



Young spotted lanternfly nymph. Photo credit: L. Barringer, PA Dept of Ag, Bugwood.org



Older SLF nymph. Photo credit: L. Barringer, PA Dept of Ag, Bugwood.org



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

it: N. it: N