

INSECTS

Brian Kunkel

Ornamental IPM Specialist

FALL WEBWORMS. The second generation of fall webworms are becoming more visible in certain areas and typically occur between 1401 – 3226 [2723 peak] GDD₅₀. There are two biotypes or races of fall webworms found in DE - the black-headed race and the red-headed race. Fall webworms feed on over 85 species of trees including, walnut, hickory, fruit trees, maples, popular, oak, linden, cherry, and sweetgum. The first and frequently less numerous (so not as visible) generation occurs between 802 -1517 [1105 peak hatch] GDD₅₀.

Adult webworms are white sometimes with brown to black spots on their wings and emerge sometime in mid- to late-June. The larvae are pale yellow to pale green with black spots along the back and covered with long white to yellowish hairs. Larvae form webbing around a few leaves and feed gregariously encasing other leaves in their webbing as they grow. Caterpillars feed for about six weeks before they pupate in the soil, bark crevices or leaf litter.

Management of fall webworm populations now should reduce populations occurring during August or September. Their damage now is still mostly aesthetic. Control options now are the same as for later populations and include tearing the webbing to facilitate access to the caterpillars for natural enemies, removal of the webbing, or chemical treatment. Pruners, a strong stream of water, hands, stick or other tools are the easiest ways to tear open, remove the webbing, or remove the leaves being consumed. Wasps use these openings to crawl in and remove the caterpillars. Pesticide applications are rarely necessary for this insect but may include spinosad, insecticidal soap, chlorantraniliprole, a pyrethroid, carbaryl, or an insect growth regulator such as tebufenozide or diflubenzuron.

DISEASES

Nancy Gregory Plant Diagnostician

PHYTOPLASMA induced diseases such as aster yellows occur on aster, coneflower, daisy, and other herbaceous plants including vegetables such as tomato and carrot. Symptoms include distortion of flowers, stunted growth, yellowing, stiff distorted stems, and odd branching angles. Flowers are replaced by tufted green misshapen leafy structures, and leaves may be off color. Aster vellows is caused by phytoplasma, a very small organism similar to a bacteria but without cell walls. Phytoplasma inhabit phloem and are transmitted by phloem feeding planthoppers.

UNIVERSITY OF DELAWARE

Issue 18

What's Hot!

Saturated soil increases risk of uprooting of trees with compromised root systems.

Brown patch on turf is affecting tall fescue lawns. Favored by warm overnight temperatures and high moisture.

Continue to look for spotted lanternfly in either fourth instar or adult stages.

Dogwood sawfly, plant hoppers and aphids all found on shrubby dogwoods this week.

Doug Tallamy is looking for places with apple oak gall and cicada killer infestations. Contact dtallamy@udel.edu if you see any infestations.



Black headed race fall webworm. Photo credit: Lacy L. Hyche-Auburn University, bugwood-org

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.

COOPERATIVE EXTENSION

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.

(Continued)

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

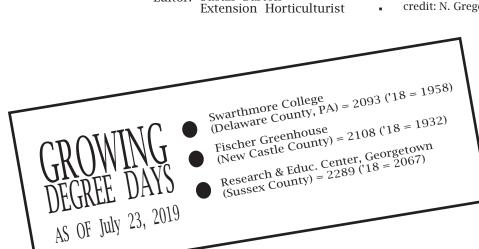
Diseases (Continued)

There is no cure for aster yellows or other phytoplasma diseases. Remove affected plants to minimize spread and control nearby weeds that may serve as hosts, such as dandelion. Aster yellows is not known to infect woody ornamentals, but there are phytoplasma induced yellows diseases on elm and ash

(https://www.fs.usda.gov/naspf/sites/default/files/public ations/elm_yellows-pest-alert-120709_low-res.pdf). Overall, we know very little about plant diseases caused by phytoplasma and spiroplasma organisms, but much of what we know was discovered by our colleague Bob Davis from USDA, who recently passed away. He will be missed.



 Aster yellows phytoplasma infection on Echinacea. Photo credit: N. Gregory



Editor: Susan Barton



Oak apple gall. Photo credit: Steven Katovich, USDA Forest Service, Bugwood-org



Fall webworm damage. Photo credit: B. Kunkel



Cicada killer. Photo credit: Nancy Kinkle-University of GA, Bugwood-org