

<u>INSECTS</u> Brian Kunkel

Ornamental IPM Specialist

FALL WEBWORM (*Hyphantria cunea*), may completely defoliate smaller trees and shrubs but it is rare for them to cause actual damage to the plant. Plants attacked include hickory, pecan, mulberry, walnut, elm, alder, willow, oak, sweetgum, poplar, and many others.

August 7, 2020

The caterpillars are gregarious feeders. They will form a white web around the feeding site, typically around the terminal end of branches, and they make the "tent" or webbing bigger as they need more leaves. They will live out their entire larvae stage within the webbing. Caterpillars are active 1200-1800 GDD, webbed tents become apparent 1850-2050 GDD.

When scouting for fall webworms look for white webbing on the ends of branches, if the webbing is brown/tan there are no larvae inside it. Adult webworms are white sometimes with brown to black spots on their wings and emerge 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 colored hairs. Caterpillars feed for about six weeks before they pupate in the soil, bark crevices or leaf litter. There are two generations per year in the mid-Atlantic region.

The fall webworm has over 50 natural predators and 36 species of parasites that help keep populations in check. If you can reach the webbing simply pull it open exposing the caterpillars. Caterpillars will redirect all their attention from feeding to trying (continued)

DISEASES

Jill Pollok Plant Diagnostician

BACTERIAL LEAF SCORCH of shade trees is caused by the bacterium *Xylella fastidiosa*, which is vec-tored by xylemfeeding insects: treehoppers, sharpshooters, and spittlebugs. The bacteria multiply in the plant's xylem and block water movement from the roots. We started seeing symptoms in the red oak family a couple weeks ago (red, pin, black, and scarlet are particularly susceptible). Other com-monly susceptible hosts include maple, sycamore, elm, dogwood, sweetgum, and ginkgo. Symptoms develop as marginal browning or scorching on leaves, usually appearing in mid- to late-summer to fall. Often a brown or yellow band delineates the brown from green tissue. In early infections, certain branches might only be affected. Eventually, widespread branch dieback will occur and tree death, with the tree progressively getting worse year after year. It's easy to

(continued)

UNIVERSITY OF DELAWARE

Issue 20

What's Hot!

Find information here about pruning storm-damaged trees: http://www.udel. edu/007537

Watch vehicles for spotted lanternfly adults. Adults are commonly found now, and we need to avoid taking them on trips with us.

Scout for tuliptree and magnolia scale because we are getting close to crawler activity.

There is a stormwater session coming up on August 13. https://www. sussexconservation.org/events/sswworkshop-4.html

To register for this event - https://www. sussexconservation.org/events/sswworkshop-4.html

Insects (continued)

to fix the webbing, during this time natural predators will feed on them. If the webbing is fixed, simply keep opening it back up. There is no need for chemical treatment. Although insecticide applications are not necessary, the following are products available for use: spinosad, insecticidal soap, chlorantraniliprole, a pyrethroid, carbaryl, or an insect growth regulator such as tebufenozide or diflubenzuron.

-or more information

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

Helpful numbers to know:	<u></u>
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 photos at http://extension.udel.edu.ornamentals/

COOPERATIVE EXTENSION

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Diseases (continued)

confuse bacterial leaf scorch symptoms with environmental drought symptoms. Bacterial leaf scorch symptoms generally first appear on lower branches and older interior leaves, and progress towards the branch tips, whereas drought scorch symptoms appear fairly uniformly around leaf edges and affect newer as well as older leaves, and often occur on the majority of the canopy. A lab diagnosis of *X. fastidiosa* is important for determining management options. Diagnosis is most accurate when leaves are collected in Sept.-Oct. I will provide an update with instructions later this month on how to collect and submit samples to the Diagnostic Clinic. Once a tree is infected, control is almost impossible. Maintain tree health and follow good management practices to slow symptom progression--water during drought, mulch, and avoid mechanical or chemical wounding. Remove severely infected trees to reduce the chance of spread to healthy trees. The tree growth regulator Cambistat (paclobutrazol) can also slow or reduce disease symptom progression but will not completely cure an infected tree.

Editor: Susan Barton

Extension Horticulturist

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Bacterial leaf scorch in red oak. Photo credit: Jill Pollok

UNIVERSITY OF DELAWARE Swartnmore Couege (Delaware County, PA) 2222 ('19 = 2491) COOPERATIVE Swarthmore College EXTENSION riscuer Greenmouse New Castle County, DE = 2150 (19 =2500) Research & Education Center - Gorgetown Fischer Greenhouse (Sussex County, DE) = 2322 (19 =2673) AS OF August 4, 2020

Fall webworm. Photo credit: L. Hyche, Auburn University, bugwood.org

Fall webworm webs. Photo credit: B. Kunkel