Cooperative Extension
ORNAMENTALS
• H O T L I N E •

June 5, 2020

Issue 11

INSECTS

Brian Kunkel
Ornamental IPM Specialist

Ash trees infested with emerald ash borers were found in both Sussex and New Castle counties during the fall of 2018. The ornamentals team installed demonstration gardens in Sussex and New Castle counties with green ashes and red maples as part of an E-IPM grant to provide learning opportunities about this pest in the spring of 2019. These trees were planted too deep or over-mulched to increase the stress levels on the plant and the attractiveness to various pests. Goal achieved! Our ash trees have been infested with emerald ash borers!

EMERALD ASH BORERS first arrived in the United States in Michigan in 2002 and were found in Delaware in 2016 on a surveillance trap. Many borer species take advantage of stressed trees to infest the trees; however, emerald ash borers (Coleoptera: Buprestidae) successfully attack and colonize healthy ash trees. This insect attacks all ash (Fraxinus species) and white fringetree (Chionanthus virginicus). Adults emerge from infested trees sometime in May through June and leave behind a D-shaped exit wound on the bark of the tree. Adults feed, mate and females lay eggs on the trunk of the tree. Egg laying occurs from about mid-May until sometime in August. After the eggs hatch, larvae chew through the bark and feed on cambium tissues of the tree forming S-shaped galleries underneath the bark. Indicators that emerald ash borers are infesting an ash may include: decline in canopy density, epicormic growth, increased woodpecker activity, and sometimes split bark. These galleries are filled with the borer's frass because it is not expelled outside the tree like the lilac/ash borer.

(continued)

DISEASES

Nancy Gregory
Plant Diagnostician

DOGWOOD SPOT ANTHRACNOSE is caused by the fungus Elsinoe corni and is a common disease on flowering dogwood. It shouldn't be confused with the serious disease, dogwood anthracnose, which is caused by the fungus Discula destructiva. Spot anthracnose is distinguished by small reddish-purple leaf lesions with a tan center. It also affects flower bracts and can distort them. Sometimes the spots fall out, causing a shot-hole appearance. This disease is worse in springs with high rainfall, like this one. Rake and throw away affected leaves. This disease usually isn't severe enough to warrant fungicide applications, and there are dogwood cultivars that are resistant: 'Cherokee Sunset', 'Cherokee Chief' and 'Weaver's White'. The disease overwinters on affected shoots so it might come back next year, but the severity depends on the weather.

(continued)

What's Hot!

A webinar on irrigation and drainage as part of the Stormwater Workshop Series will be held on June 18 from 9:45 to noon. Sign up throught the Sussex County Soil Conservation District at https://www.sussexconservation.org/events.html?layout=columns.

The virtual pest and benefical insect walk is June 11 from 4-6 PM. Pre reister here https://www.pcsreg.com/pests-and-beneficial-insects

Wheel bug on bald cypress - sample of what you will see on the pest walk. Photo credit: East Coast Garden Center

Dogwood spot anthracnose. Photo credit: N. Gregory

For more information

on pests and 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 photos at http://extension.udel.edu.ornamentals/

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Insects (continued)

Larvae overwinter inside the tree and may emerge the following year.

Treat with trunk sprays, soil injections, trunk injections, and soil drenches of a variety of products (emamectin benzoate and neonicotinoids such as imidacloprid, clothianidin, and dinotefuran). Spring applied products reduce canopy decline better than fall applications. Imidacloprid is the most commonly used neonicotinoid and protects both small and large trees. Dinotefuran seems to work better on smaller diameter trees. The website http://www.emeraldashborer.info/index.php provides the most up-to-date and complete information on this pest and the many research projects studying EAB throughout the country. Delaware's Department of Agriculture also has a website for this insect found at https://agriculture.delaware.gov/plant-industries/emerald-ash-borer-delaware/

Diseases (continued)

POWDERY MILDEW causes distinctive white powdery patches on the upper- and undersides of leaves. It can also grow on stems, buds and flowers. Newly affected leaves are often stunted or distorted. Older leaves might show brown or purpling blotches. This fungal disease (caused by Erysiphe pulchra) favors cooler weather and thus is more prevalent in the spring and fall. Plant resistant varieties, prune out dead branches for good air circulation, and if severe enough, fungicide sprays can be applied. Applying nitrogen is discouraged because it supports new growth that will succumb to the disease. Resistant flowering dogwood varieties are available: 'Cherokee Brave,' 'Jean's Applachian Snow,' 'Karen's Appalachian Blush,' and 'Kay's Appalachian Mist'. Kousa dogwoods have resistance, and C. kousa x florida hybrids have resistance as well.

Editor: Susan Barton
Extension Horticulturist

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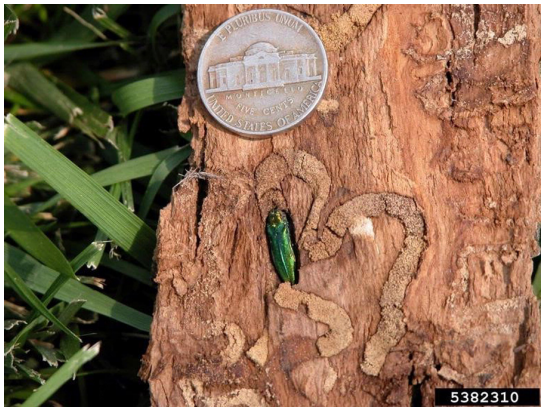
GROWING DEGREE DAYS

AS OF June 2, 2020

- Swarthmore College (Delaware County, PA) 481 = ('19 =800)
- Fischer Greenhouse (New Castle County, DE = 437 ('19 = 842)
- Research & Education Center - Gorgetown (Sussex County, DE) 531 = ('19 =955)

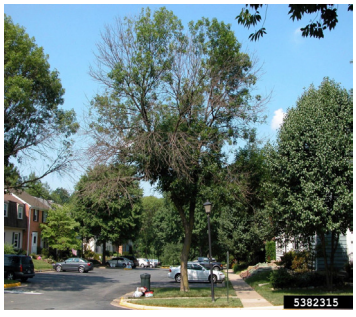
EAB bark splitting. Photo credit: B. Kunkel

EAB emerging. Photo credit: B. Kunkel



EAB adult and S-shaped galleries. Photo credit: E. Day, VPI, bugwood.org

Powdery mildew on dogwood. Photo credit: J. Pollok



Epicormic growth from EAB. Photo credit: E. Day, VPI, bugwood.org

EAB crown thinning. Photo credit: B. Kunkel