May 8, 2020

INSECTS Brian Kunkel

Ornamental IPM Specialist

LACE BUG egg hatch has stared in Sussex county; however, according to GDD50 for New Castle county we will begin soon. Spring has been cool after the initial warm winter and March. Egg hatch for this insect occurs between 181 - 251 [202 peak] GDD50. The plant phenological indicator for egg hatch is full bloom of Aesculus hippocastanum. First generation nymph activity is 240 - 561 [318 peak] GDD50. Other areas may see nymph activity start between 240 - 998 [430 peak] GDD50. Management of the first generation or overwintering adults reduces the impact this pest has on infested plants for the rest of the summer. Hawthorn, azalea, sycamore, and oak lace bugs are all common species found in the mid-Atlantic area. Hawthorn lace bugs feed on hawthorn, cotoneaster, quince, crabapple, mountain ash, and pyracantha. Azalea lace bugs feed on various azaleas; oak lace bugs feed on different species of oak trees. Overwintering hawthorn lace bug adults begin feeding in the spring at 196 - 472 [349 peak] GDD50 or when Lagerstroemia indica is at the leaf bud break phenological stage. Oak, sycamore, and azalea lace bugs may have two to three generations a year.

Shiny black fecal spots on the underside of the leaves called tar or resin spots, or the stippled (whitish- to bronzed-colored) upper leaf surfaces are indicators of lace bug infestation. Lace

DISEASES

(continued)

Nancy Gregory Plant Diagnostician

DISEASES ON SPRING WILDFLOWERS occur in our landscapes. and some have been investigated as possible biological control methods for weedy species. Currently, there are several rust diseases showing on spring ephemerals. A rust fungus has been observed in Newark on wild violet (*Viola sororia*) leaves, probably Puccinia violae, a fungus that only goes to violet, viola, and pansy. Another rust fungus with only a single host is mayapple rust, also visible now in the landscape. Mayapple rust is a common disease that can disfigure leaves and petioles with yellow spots on the upper leaf surface and orange powdery growth on the lower leaf surface. The fungus was known as *Puccinia*, but has been recently renamed as Allodus podophylli and only affects *Podophyllum.* These rust fungi will not kill the host plants and are only a curiosity. The weed control program under USDA ARS has released several rust fungi that were collected regionally that have helped to control weedy thistle species in Maryland. These fungi were investigated under strict experimental conditions to ensure safety in the landscape, and are tools in the toolbox for weed control.

UNIVERSITY OF DELAWARE

Issue 7

What's Hot!

Seasonal drop of second year leaves on American holly is normal.

Ambriosia beetles have been reported in flight in MD. The first applications or bifentrhrin or permethrin lasts about 3 weeks so if you treated plants, you may want to consider renewing protective sprays.

Eastern tent caterpillar and other caterpillars are in their wandering stage, looking for a place to pupate. They are finished eating, so no treatment is useful now.



Rust on wild violet leaves. 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	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

This newsletter is brought to you by the University of Delaware Cooperative Extension, a service of the UD College of Agriculture and Natural Resources--a land-grant institution. This institution is an equal opportunity provider. If you have special needs that need to be accommodated, please contact the office two weeks prior to the event.

Insects (continued) bug nymphs are not lacelike, but are spiny and usually dark brown to black.

Horticultural oil or insecticidal soap applications must contact the insects; consequently, the underside of leaves must be sprayed. These products have low impact on the natural enemies attacking lace bugs. Heavy infestations may require the use of products such as acephate, carbaryl, cyfluthrin, imidacloprid, dinotefuran, chlorantraniliprole, acetamiprid and pyrethrin. Do not use imidacloprid on plants with a history of mite problems.

Editor: Susan Barton Extension Horticulturist



TURF WEEDS

John Emerson

Nutrient Management Agent

WILD VIOLET (Viola papilionacea) is a low growing perennial with small rhizomes. It has white to dark purple flowers and heart-shaped leaves. It is found in moist, shaded areas of thin or patchy turf. Severe turf scalping can promote proliferation of wild violet, which is one the most resilient and tough-to-control turf weeds. It grows quickly in thin turf if left unchecked, especially in the spring. Mechanical control options include hand picking or digging, but it is important to remove all the rhizomes. This works for small outbreaks in turf but is inefficient for larger areas. Hand weeding when soil is moist may make chemical control easier. Chemical options include any combination of 2,4-D, dicamba, MCPP, triclopyr, or fluroxypyr. Only one herbicide, triclopyr, has shown to provide outstanding control. Typically, one application of triclopyr alone, at the full label rate, will take care of your infestation. If the product does not contain triclopyr, multiple applications may be needed. Remember to always read the label carefully and calibrate equipment! Reduce shade in the infestation area to promote a thicker, healthier turf to compete against this plant. The more sunlight the better for good turf growth.

GROWING DEGREE DAYS AS OF May 5, 2020

- Swarthmore College (Delaware County, PA) = 176 ('19 = 362)
- Fischer Greenhouse
 (New Castle County, DE = 162 ('19 =
- Research & Education Center Gorgetown (Sussex County, DE) = 270 ('19 = 443)



Lace bug adult Photo credit: B. Kunkel



Lace bug adult Photo credit: B. Kunkel



Wild violet Photo credit: J. Emerson



Wild violet Photo credit: J. Emerson