

ORNAMENTALS

• H O T L I N E •

June 3, 2016

Issue 11

INSECTS

Brian Kunkel
Ornamental IPM Specialist

One hundred percent of HEMLOCK WOOLLY ADELGID eggs hatch from 505 - 676 [591 peak] GDD₅₀. The plant phenological indicator is petal fall of *Cornus kousa*. Applications of horticultural oil at 1 - 2% (v:v) during this time is an effective control option. Crawlers quickly settle at the base of needles and begin their summer resting period. Crawlers appear as small black specks, and may appear dead because they feed and develop very little during the summer months. Settled crawlers resume feeding in the fall and are called sistens nymphs.

This exotic invasive insect feeds at the base of needles causing needle desiccation which then gives the tree a grayish coloration. Eastern and Carolina hemlocks are susceptible to this pest, and HWA has caused the death of large tracks of hemlocks especially in North Carolina. Wind, birds, deer and people are ways the pest moves throughout the range of hemlocks. A heavily infested tree is often easy to see by the white ovisacs located at the base of needles on tree branches. These ovisacs may contain up to 300 eggs. Dieback of large limbs may occur within two years and progresses from bottom up.

Water hemlocks during the summer to reduce drought stress to the trees. Soil tests could be conducted to make sure hemlocks are in soils with the pH, nutrients, and micronutrients they need to grow healthy. Do not fertilize hemlocks that are heavily infested with adelgids because the nitrogen increases adelgid, mite, and scale populations. Neonicotinoid applications, such as imidacloprid or dinotefuran, provide control of adelgid populations. Imidacloprid takes time to get into the trees and is often soil-injected in the fall. Imidacloprid will not control elongate hemlock scale and can cause outbreaks of spruce spider

(Continued)

DISEASES

Nancy Gregory
Plant Diagnostician

SEPTORIA LEAF SPOT on *Rudbeckia*, or Black-eyed Susan is beginning to show in landscape flower beds, and will worsen over the the summer. The disease is caused by a fungus that survives in the plant debris from last season, and is favored by wet weather and high humidity. Plants are not usually killed, but can die back to the base, and look unsightly, and disease will worsen in beds each year. To manage Septoria leaf spot, avoid overhead water if possible. Keep plants thinned so they have good air circulation and dry quickly after rains. At the end of the season (or earlier if the plants are severely spotted), remove infected leaf material and discard in the trash so spores cannot re-infect or

(Continued)

What's Hot!

Defoliation of sycamore trees from anthracnose has been dramatic in the landscape. Trees should put out a second flush of leaves. Ash rust is also beginning to show.

Winter annual weeds, like chickweed and henbit were prolific this year. They are dying back now, but also going to seed. Remove from the landscape before seed is dispersed and they become a bigger problem next year.

Insects (Continued)

mite populations. Dinotefuran may be found in as few as three weeks in treated plants, may provide some control of elongate hemlock scales, and may be applied in the spring. Lady beetles are predators that feed on this pest.



Hemlock woolly adelgid. Photo credit: PA Dept Conservation & Natural Resources - Forestry.bugwood.org

For more information

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://sites.udel.edu/ornamentals/>

UNIVERSITY OF DELAWARE

COOPERATIVE EXTENSION

Diseases (Continued)

over-winter. A labeled fungicide containing myclobutanil or chlorothalonil may be used for Septoria, a fungus. However, fungicides are mostly preventative and will not cure existing infections. Prune foliage and then spray to protect the new foliage. Put it on your calendar for next season, to spray with a fungicide before you see the spots, probably the last week in May. Spray again in 10 days.

ASTER YELLOWS ON PURPLE CONEFLOWER (*Echinacea purpurea*) results in distortion of plants, causing distorted flowers and flowers that remain green or leaf-like. Stems may be flattened or broad. It is caused by a phytoplasma, a very small bacteria-like organism carried by leafhoppers. Numerous species of plants are susceptible, but we see it most often on ornamentals such as coneflower and aster. It can affect carrot and some other edibles. Damage from eriophyid mites can cause similar distortion. The best control is removal of the affected plants.



Septoria leaf spot on Rudbeckia. Photo credit: N. Gregory

Editor: Susan Barton
Extension Horticulturist

**GROWING
DEGREE DAYS**
AS OF May 31, 2016

- Swarthmore College
(Delaware County, PA) = 596 ('15 = 749)
- Fischer Greenhouse
(New Castle County) = 562 ('15 = 719)
- Research & Educ. Center, Georgetown
(Sussex County) = 635 ('15 = 772)