

ORNAMENTALS

• H O T L I N E •

May 4, 2018

Issue 7

INSECTS

Brian Kunkel
Ornamental IPM Specialist

SPRUCE SPIDER MITES. Insect activity is behind compared to recent years; however, these cool spring temperatures are suitable for cool season mites. Spruce spider mite eggs typically hatch as early as 0 GDD₅₀ (hatch on or before 1 March) through 947 with a peak of 70 GDD₅₀. Another cool season mite that should have spring activity is the southern red mite.

Spruce spider mites feed on fir, arborvitae, spruce, Douglas-fir, and other conifers. They feed on older foliage first and are olive-dark red with reddish-yellow legs. Two reddish eye spots can be seen along with a pale stripe down the back when they are examined under a scope. Their eggs are orange with ridges along the sides of the sphere and have a "thread" at their top. Their entire life-cycle may take only 12-19 days in optimum conditions. Spruce spider mites nymphs typically feed in the spring around 0 - 1176 [213 peak] GDD₅₀. Mite feeding usually continues until temperatures are consistently over 80° F. In the summer, damage appears as bleaching, yellowing, stippling or bronzing of the needles; however the damage is usually from intensive feeding in the fall.

Monitor for the mites by using a clipboard and a white sheet of paper. The mites will be the size of the period at the end of the sentence. Watch for predatory mites and small lady beetles; both are predators of the spruce spider mite and should be conserved. Miticides available for control include hexythiazox (Hexygon, Savy), bifenazate (Floramite), abamectin (Avid), spiromesifin (Forbid), spirotetremat (Kontos) and others. We are looking for a site to conduct a miticide trial this spring evaluating newer miticides against industry standards. Previous research has shown bifenthrin (Talstar) can cause mite 'resurgences' because natural enemies are killed; thus mite eggs are able to hatch without threat of predators.

DISEASES

Nancy Gregory
Plant Diagnostician

MOUNTAIN LAUREL is a bit out of its range in the parts of the region with sandy soils and humid coastal breezes. These shrubs prefer understory locations with good drainage. A *Cercospora* fungal leaf spot can be unsightly, but rarely affects the long term health of the shrub. Shrubs can be pruned right after bloom, to remove affected branches and increase air circulation. Pick up and remove diseased branches.

STIGMINA NEEDLCAST occurs on blue spruce, white spruce, and Norway spruce, especially trees affected by stress and under wet

(Continued)

What's Hot!

• Infection periods for apple scab and fire blight intensify when we have rain events. Atmospheric spore loads for apple scab are very high in the region now.

• David Owens has found active Eastern Tent Caterpillars in Sussex county.

• Bark beetle activity should be increasing and susceptible trees should be protected if they are stressed or signs of activity are spotted.

• Boxwood leafminer larvae are still feeding inside leaves but should be pupating soon.

• Keep an eye out for spotted lanternfly nymphs (more in next week's Hotline)

• Doug Tallamy is looking for buckmoths again. Contact dtallamy@udel.edu.



Spruce spider mite. Photo credit: T. Wootten

For more information

on pests & 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 pictures at <http://extension.udel.edu/ornamentals/>

UNIVERSITY OF DELAWARE

COOPERATIVE EXTENSION

Diseases (Continued)

conditions. Due to the formation of fruiting bodies along the stomates on needles, it can be confused with *Rhizosphaera* needlecast, but management is much the same. *Stigmina* is found on green needles as well as browning needles, and spores will be released in the spring to infect new growth. Symptoms appear as needle drop and thinning of trees. To manage prune out dead or dying branches, increase air circulation amidst trees, and water during times of drought. Fungicide sprays with chlorothalonil or other labeled fungicides can help to suppress infection of new needles in the spring, with two or three applications now as needles expand. Some fungicides will affect the color on blue spruce.

Editor: Susan Barton
Extension Horticulturist



Stigmina needlecast fruiting bodies on blue spruce. Photo credit: N. Gregory

**GROWING
DEGREE DAYS**

AS OF May 1, 2018

- Swarthmore College (Delaware County, PA) = 116 ('17 = 601)
- Fischer Greenhouse (New Castle County) = 116 ('17 = 618)
- Research & Educ. Center, Georgetown (Sussex County) = 162 ('17 = 776)



Southern red mite. Photo credit: T. Wootten