

# INSECTS

#### Brian Kunkel Ornamental IPM Specialist

COOLER TEMPERATURES recently are slowing down insect activity. For example, aphid populations are lower compared to previous years. This time last year we were experiencing temperatures well suited for two common spring pests on boxwood so this year you can get a jump on those pests and start scouting for leafminer and/or psyllid activity.

BOXWOOD LEAFMINER are still feeding as larvae or recently started to pupate (48 – 585 [204 peak] GDD<sub>50</sub>). Adult leafminers may begin emerging from leaves about 192 - 796 [366 peak]  $GDD_{50}$ . Adults are small orange yellow to red and gnat-like. They commonly attack Buxus microphylla and B. sempervivens; however, there are resistant cultivars such as 'Handworthiensis', 'Pyramidalis' and 'Varder Valley'. Females mate and die shortly after ovipositing eggs into boxwood leaves. These eggs hatch after three weeks and yellowish colored larvae begin to feed inside, causing a blister-like blotch to form on the undersides of leaves. Infested leaves may be slightly discolored. There is only one generation per year and larvae overwinter inside the leaves.

BOXWOOD PSYLLIDS are the other common pest found on boxwoods. They are frequently found feeding on cupped leaves at (Continued)

# DISEASES

Nancy Gregory Plant Diagnostician

VOLUTELLA BLIGHT on Pachysandra is a yearly problem on groundcover plantings. Japanese spurge is more susceptible to fungal leaf blight than the native Allegheny type, *Pachysandra terminalis*. Leaf blight is characterized by brown circular lesions. often with a zonate pattern on the leaf spot, and can spread to stems. Affected areas can be trimmed and raked to remove blighted foliage and then sprayed with a labeled fungicide.

Clement, Rane, and Carignan note that problems with Volutella blight this spring may be due to the warmer winter, weather extremes, or debris may contribute to its prevalence so far this year. The mild winter could have allowed the fungus to be active, and debris such as branches or leaves overlaying pachysandra may hold moisture the fungus needs within the plant canopy (UMD weekly IPM report 10 April 2020). They further suggest avoiding mulches with shredded bark products around pachysandra. Pachysandra may continue to have issues with this disease further into the year if moisture is adequate or the plants are stressed. Stresses for pachysandra include sunny, dry locations or areas that were shaded but have become more open and sunny recently.

#### Issue 5

## TURF

John Emerson Nutrient Management Agent

SPRING TURFGRASS DISEASES. Common fungal diseases are prevalent in turf this time of the year. Red Thread is one of them. Identifying this disease is a bit easier than some of the others. Its name is a great description of what it looks like. The fungus resembles red threads (aka:sclerotia) hanging off the leaf blade. Also, you might be able to see small, pinkish, cotton looking mycelium patches around the affected area. Cool, wet periods with malnourished turf provide the best opportunity for disease. Fortunately, proper turf fertility, and aeration help prevent disease pressure. If it becomes a major problem an application of propiconazole, or chlorothalonil will stop spread immediately. Both fungicides will stop the spread of other prevalent spring turf diseases as well. Take care of your lawn health & nutrition first then look for possible chemical solutions.



Red thread on turf. Photo credit: whygoodnature.com

more

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 Kent County Extension Sussex County Extension	831-2506 730-4000 856-7303
View more pictures at http://extension.udel. edu/ornamentals/	

## UNIVERSITY OF DELAWARE

### COOPERATIVE EXTENSION

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#### Insects (Continued)

the terminal ends of twigs and branches. In April, nymphs feed and produce white wax in the cupped leaf. *Forsythia* x *intermedia* may be in full bloom or growing degree days<sub>50</sub> are 64 -714. There is one generation per year and most *Buxus sempervirens* are susceptible; whereas the English boxwoods are relatively resistant. Adults look like miniature cicadas and the nymphs are flattened and green in color.

Little is known about their natural enemies. Chemical controls for leafminers may target either larvae or adults. Products targeting adults must be properly timed to coincide with adult fly emergence. Applications when weigela is in bloom should reduce populations. Products available for use include abamectin, bifenthrin or other pyrethroids, carbaryl, imidacloprid, dinotefuran, spinosad and acephate. Previous work with Casey at Longwood Gardens revealed fall soil injections of dinotefuran provided about 70% control of boxwood leafminers by two weeks whereas imidacloprid took more than three months for similar control. Insecticidal soap may be applied to control psyllid nymphs when first detected. Azadirachtin, *Beauvaria bassiana*, pyrethroids and neonicotinoids are all available chemical options for boxwood psyllids.



Boxwood psyllid. Photo credit: N. Gregory

Editor: Susan Barton Extension Horticulturist



Boxwood leafminer. Photo credit: J.A. Weidhass - VA Polytechnic Institute and State University - Bugwood.org



Volutella blight. Photo credit: Penn State Dept. of Plant Pathology & Environmental Microbiology Archives -Bugwood.org



Boxwood leaf miner. Photo credit: B.A. Kunkel