

ORNAMENTALS

• H O T L I N E •

September 21, 2018

Issue 24

INSECTS

Brian Kunkel
Ornamental IPM Specialist

SPRUCE SPIDER MITES: We may have started cooling off enough for this pest's activity to resume. Spruce spider mite and southern red mite activity will increase with cooler fall temperatures. Scout host trees and shrubs of these mites showing damage this summer soon.

Spruce spider mites feed on fir, arborvitae, spruce, Douglas-fir, and other conifers, feeding on older foliage first. They are olive to dark red with reddish-yellow legs and under a microscope two reddish eye spots can be seen along with a pale stripe down the back. 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 mite nymphs start feeding in the fall around 2301-3957 [3094 peak] and mature to adults that feed from 2694-3957 [3143 peak] GDD₅₀. Our range and peak for fall mite activity for nymphs are probably later than previously documented because of our hot weather this month; thus, the need for scouting. Mite feeding usually continues until there is a hard frost. In the summer, damage appears as bleaching, yellowing, stippling or bronzing of the needles, which is often from intensive feeding in the fall.

Monitor for the mites by using a clipboard and a white sheet of paper. 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), 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

DODDER is a parasitic plant seen in late summer as a vine type growth winding around other plants in gardens and landscapes. Dodder, *Cuscuta* species, is an obligate parasite, meaning it cannot live on its own and cannot photosynthesize to make its own food. Dodder is an annual, germinating each year from seed which are numerous and long-lived in soil. Seeds germinate in spring or early summer, and the vine-like orange to yellow stems entwine host plants. The stems produce tendrils and modified roots that penetrate the host plant, and absorb water and nutrients from the host. Leaves are small and inconspicuous.

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What's Hot!

Moisture fluctuations and heat have resulted in premature leaf drop in trees.

Brown patch and summer patch are still being diagnosed in turf. Fall fertilize and over-seed in late September.

CULTURE

WEATHER WOES have plagued us all summer. DEOS (the Delaware Environmental Observation System) indicates that most areas in the state are already over the average yearly rainfall which is 41 inches of rain per year in Delaware. Planting and plant growth was delayed this spring due to cold and wet soils. Temperatures increased in June and July, but rainfall amounts were still above average. There were an average of 47 rainy days out of about 100 over the summer months. A two week dry period occurred in early July, with high

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Dodder on anemone. Photo credit: N. Gregory

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 pictures at <http://sites.udel.edu/ornamentals/>

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COOPERATIVE EXTENSION

Diseases (Continued)

Flowers are small and white to yellow, in clusters. Seeds can be carried by birds and in water. Dodder is commonly found in flower beds of annuals and perennials, and in pasture sites. To manage, remove before seed set. Remove affected host plants entirely to be sure dodder plants are completely gone.

HEART ROT AND BUTT ROT on hardwood trees may be caused by either a brown rot fungus or a white rot fungus. The difference is due to the decomposition enzymes the fungi secrete to break down wood. A brown rot fungus digests cellulose and hemicellulose. The wood is left with lignin remaining as a brown crumbly residue, sometime in a squared off cubicle-rot remnant. A white rot fungus digests lignin, hemicellulose, and cellulose. The wood is left with white, stringy fibers that appear bleached. These fungi can colonize trees extensively before trees begin to decline.

Editor: Susan Barton
Extension Horticulturist

Culture (Continued)

- temperatures. We still have three months to go in 2018, but soils are very saturated. Saturated soils lead to poor root development and plant health problems, especially with newly transplanted trees and shrubs. Low lying and wet areas are conducive to root rot microbes. Trees in saturated soils with poor root systems may fall over with strong wind gusts. Prune or remove dead or damaged trees near homes and buildings.

- Inonotus* bracket fungus from oak. Photo credit: N. Gregory



GROWING DEGREE DAYS
AS OF September 18, 2018

- Swarthmore College (Delaware County, PA) = 3427 ('17 = NA)
- Fischer Greenhouse (New Castle County) = 3389 ('17 = NA)
- Research & Educ. Center, Georgetown (Sussex County) = 3647 ('17 = NA)



Flooded mower tracks, UD Botanic Gardens. Photo credit: N. Gregory



Spruce spider mites. Photo credit: T. Wooten



Standing water, Newark Farm in June. Photo credit: N. Gregory