

INSECTS

July 3, 2020

Brian Kunkel

Ornamental IPM Specialist

JAPANESE MAPLE SCALES are common in landscapes and nurseries and feed on plants from 45 different genera (27 families). Hosts include: Acer, Cornus, Euonymus, Ilex, Ligustrum, Magnolia, Malus, Prunus, Rosa, Syringa, Ulmus and Zelkova among others. This armored scale is difficult to control because it has an extended crawler activity period (8 - 10 weeks), two generations a year and is small. Infestations will cause dieback and eventual plant death. The first generation of crawlers are moving on hosts now. We are approaching peak crawler activity this week.

This armored scale is long, thin, irregularly oyster-shaped, and has a white waxy covering over a dark brown skin. Males and females look similar. Immature scales and females (seen when the covering is removed) typically are light purplish. Crawlers are also light purple and settle relatively quickly (usually within hours of emerging). This scale is most often found settled on the bark of branches, twigs and trunk of the host; however in heavy infestations they may be on foliage. Recent research at the University of Maryland found there are two generations with the first beginning at about 806 GDD50 and continuing for about 7 weeks with a peak at 1144 GG50. The second generation starts around 2220 GDD50 continuing about 8 weeks with a peak at 3037 GDD50. Research from the efforts of Penn-DEL IPM group found crawler activity of one generation 695- 1973 [846 peak] GDD50 and I found additional activity 2260 - 2450 GDD50 which probably continued longer.

Scouting is important to time applications appropriately. Sample infestations prior to applications to inspect for parasitoid activity (unsightly covers may be present even when the scale (continued)

DISEASES

Iill Pollok

Plant Diagnostician

MAPLE LEAF SPOT. We've been seeing leaf spots on maple caused by Phyllosticta species, particularly on red maple. Sugar maple, Japanese maple, Norway maple, silver maple, and box elder are also susceptible, among other maple species. Spots are irregularly round and dark at first, but later the center may turn tan with a dark reddish or purple border. This disease can be confused with tar spot of maple, but tar spot lesions are consistently black without a light center or border. Black fungal fruiting bodies of Phyllosticta may be seen inside the lesions with a hand lens, often arranged in a circle. This is a minor aesthetic disease, but in ideal conditions, spots can coalesce and cause (continued)

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What's Hot!

A chrysomelid called dogbane beetle is active now and looks very similar to Japanese beetle. They have been found on milkweed - no treatment needed.

Spotted lantern fly are active and approaching or in their second instar.

Caterpillars have been observed on flowers of monarda - no treatment needed.

Small light colored mushrooms appearing in lawns are Conocybe, sometimes called a dunce cap. Growing on organic debris, they are not a sign of disease. These small mushrooms have a conical cap with gills, a thin stalk, are mostly water, and shrivel up by afternoon.

Insects (continued)

has abeen parasitized). Use horticultural oil, insecticidal soap, insect growth regulators (Distance or Talus), clothianidin or dinotefuran for control. Tank mixing horticultural oil (0.5%) with the Distance also seems to improve coverage and efficacy. Tank mixing Talus and horticultural oil may clog nozzles. Stanton Gill and I conducted an efficacy trial with Altus, Talus and dinotefuran with all three products providing adequate control.

on pests and practices covered in this newsletter, call your County Extension Office

Helpful numbers to know:	0
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 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.

Diseases (continued)

partial defoliation. Rake leaves at the end of the season and remove from the area so they don't serve as an inoculum source for next year.

LEAF SCORCH OF MAPLE. This is an abiotic disorder we've also been seeing in maples. Symptoms appear as patches of light necrotic tissue between veins, and scorched leaf margins or tips. In intense hot weather with prolonged dry periods, the rate of transpiration from leaves can exceed the rate at which trees take up water from their roots, and leaves end up damaged. Scorch often shows up on leaf tips or margins, but intense short-term water stress can cause interveinal necrosis, especially in young or not-well established trees. Scorch can be confused with maple anthracnose, which causes similar patches of necrotic tissue, however, anthracnose shows up along leaf veins, while scorch symptoms appear between leaf veins. Recently planted, young, and stressed trees are more susceptible to scorch. In dry weather, water newly planted trees every 7-10 days, depending on the type of soil and weather conditions.

TURF

John Emerson

Nutrient Management Agent

WARM SEASON TURFGRASSES. If you manage Bermuda or Zoysia now is the time to push these grasses, encourage new growth, and manage thatch accumulations. Fertilization, aerification, and verticutting should be underway, or started soon. Fertilize 7-10 days before aerification and/ or verticutting. Use a fast release nitrogen (water soluble nitrogen; WSN) source so nutrient(s) are quickly dissolved and readily available for uptake in the soil solution. Use 0.5 - 1.0 lbs of N/1000sqft for pre-practice fertility. This will encourage faster plant healing from aerification or verticutting and promote new roots and shoots. Finish aerification or verticutting by the early August to allow sufficient healing time before cold weather dormancy. Complete nitrogen applications to warm season grasses by mid to late August.

