August 2, 2019

INSECTS

Brian Kunkel Ornamental IPM Specialist

OAK LACE BUG populations are thriving on south campus around Townsend Hall. This insect is very similar to lace bugs found on azaleas, hawthorns, and sycamores, and their activity is between 1613 - 3384 [2300 peak] GDD. Look for stippled leaves with black 'tar spots' on the underside of the leaf. There are two generations per year in this area. Natural enemies often keep this insect controlled, however when treatments are necessary, options include acephate, carbaryl, pyrethroids, or a neonicotinoid such as imidacloprid. Horticultural oil or insecticidal soap is an option when temperature and humidity permit but contact with the insect is necessary.

YELLOWNECKED CATERPILLAR. This caterpillar has been observed in Maryland feeding on oak and in Pennsylvania on crabapple. They may feed on honeylocust, beech, birch, maples and many other trees. They have a jet-black head, yellow and black stripes and some white hairs. Directly behind the head is a bright yellow-orange segment. Adults emerge during June-July, mate, and females lay eggs on the undersides of leaves. This caterpillar feeds gregariously, skeletonizing leaves as early instars and consuming most of the leaf when they are older. When disturbed, larvae assume a "U-shaped" defensive posture to reduce the likelihood of attack by predators and parasitoids. Larvae actively feed between July and September depending on location and when eggs were laid, but there is only one generation per year. Birds, predatory insects, and parasitoids attack this pest. This pest seldom causes serious harm to trees and treatments are not usually warranted. Chemicals available for control include B.t., spinosad, azadirachtin, or one of the pyrethroids.

OAK GALLS. There are many different galls found on oaks and they generally do not harm the tree health. Stem or twig galls

(Continued)

DISEASES

Nancy Gregory Plant Diagnostician

FOLIAR NEMATODES are small non-segmented roundworms found in soil, usually in the genus Aphelenchoides. Symptoms on leaves are yellow to brown to purple spots that appear watersoaked or greasy, bounded by leaf veins. Plants susceptible to damage from foliar nematodes include hosta, peony, ferns, columbine, begonia, Cyclamen, gloxinia, Dahlia, Gerbera, Hibiscus, Lantana, geranium, and iris, Foliar nematodes have needle-like mouth parts called stylets; a structure characteristic of plant parasitic nematodes not present in free-living and animal

(Continued)

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What's

Plenty of sawfly present on shrubby dogwoods, especially in groups and against buildings where they can hide. Prune out inner weak stems to let air and light into the plant.

Watch for webworm, orange striped oakworm and yellownecked caterpillars (see Brian's column) on oaks.

Anthracnose symptoms on maple appear as dark discoloration along the veins. No control is usually needed.

Environmental scorch and sunscald are noticeable with the hot temperatures.

Summer turf and nursery expo is being held at the University of Delaware Botanic Gardens in Newark, DE on August 7. If you haven't registered, contact Valann Budischak (dnlainc@comcast.net).

Insects (Continued)

such as the horned oak gall may be found on pin, scrub, black, blackjack or water oaks. Another stem gall, gouty oak galls, occurs on scarlet, red, pin, or black oaks. The wasps inside these galls often take several years to develop and are protected from insecticide applications; therefore, an effective control option is to prune out the galls to lower populations. Collect and destroy fallen leaves to reduce populations of leaf galls.

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

Helpful numbers to know:

Sussex County Extension

831-8862

(for home gardeners only) New Castle County Extension Kent County Extension

831-2506 730-4000 856-7303

View more pictures at http://extension.udel.

edu/ornamentals/

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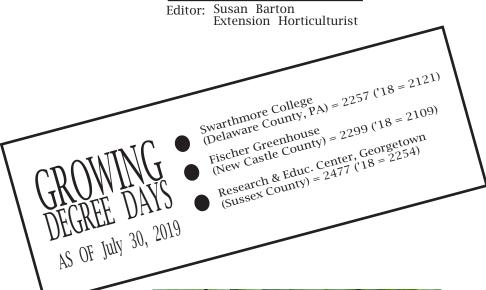
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Diseases (Continued)

parasite nematodes. The stylet is inserted into plant cells and enzymes pass into cells where components are digested, and nutrients drawn back into nematodes. Free water on stems and leaves provides an environment for nematode infection, with splashing water moving nematodes from leaf to leaf and plant to plant. Plants with symptoms occur in patches because of water splash between plants. Optimum temperatures for foliar nematode development are between 21 and 24C (70-75F), and reproduction is by means of eggs which hatch to release larvae. Management of foliar nematode is mostly cultural because chemicals do not penetrate leaves to reach nematodes. Use clean planting material, discard infected plants, avoid overhead water on leaves, and maintain good spacing between plants. Mix species of plantings to avoid monoculture of species affected by foliar nematode.



Foliar nematode symptoms on cinnamon fern. Photo credit: N. Gregory





Foliar nematode symptoms on peony. Photo credit: N. Gregory



Parasitized catalpa worm. Photo credit: J. McKinnon



Oak lace bug. Photo credit: B. Kunkel



Oak lace bug stippling damage. Photo credit: B. Kunkel



Yellownecked caterpillar on oak. Photo credit: G. Lenhard, LSU, Bugwood-org