

ORNAMENTALS

• H O T L I N E •

INSECTS

March 25, 2016

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Ornamental IPM Specialist

ERIOPHYID MITES are pests on a variety of different plants. Currently, Christmas tree farms are dealing with some eriophyid mites (rust mites or sheath mites) on spruces, pines, and firs in Pennsylvania. Some eriophyid mites can also be found feeding on hemlocks, cypress, or privet in the early spring.

Feeding damage will cause chlorotic needles or a rusty-brown color. High populations may cause needles to drop. The mites are very small and can only be seen clearly with a dissecting scope. Adults are tan to pinkish with two pairs of legs at the wedge-like end of the carrot-shaped body. Luckily, their white shed skins often are sharply contrasted against the needles and look like thin white strands. Eggs are off-white to salmon or tan, and are found on needles on the lower third (near the base). Hemlock rust mite nymph activity is frequently found between 0 - 797 [86 peak] GDD₅₀. The eriophyid mites on Christmas trees are cool season mites that begin activity sooner than spider mites (spruce spider mites), are inactive during the summer, and resume activity in the fall into December.

White pine sheath mites are another small mite that may stunt needle growth, turn them chlorotic, silver or grey, or lead to premature needle drop. This mite is found underneath the needle sheath close to the base of the needle, and are active about 0 -797 [60 peak] GDD₅₀.

Thresholds for eriophyid mites have been established in NC and MI. Scout the south or southeast side of the trees. Look for mites between needles near the base or look for eggs near needle bases. Search between 10 and 20 trees per acre, and inspect current growth, looking at upper and lower needle surfaces. Thresholds are met when 80% of inspected shoots have mites with 8 mites on a single needle. Scout on overcast days to provide greater contrast to see mites on needles. Watch for predatory mites feeding on eggs or mites. Possible products for managing this mite include horticultural oil (not on blue colored plants), abamectin, spiromesifen and tau-fluvalinate. Use of a pyrethroid will cause rust mite numbers to flare-up.

DISEASES

Nancy Gregory
Plant Diagnostician

STORM DAMAGE AND SALTWATER INTRUSION has been observed following our spring storms, especially in Sussex County, DE. Soils that do not drain well, or are high in clay content may remain saturated. Those soils are more prone to having root rot caused by fungi and other microorganisms. Roots that are exposed to saturated soils do not put out new fine feeder roots. It may take a

(Continued)

UNIVERSITY OF DELAWARE

COOPERATIVE EXTENSION

Issue 2

What's Hot!

Lesser celandine and garlic mustard are two invasive herbaceous plants that are growing vigorously in the landscape. Lesser celandine is a bulb that comes up very early and is especially prevalent in wet areas. You can dig it out now or treat it with an herbicide. Be sure to use a spreader sticker because the leaves are glossy and repel liquid. Controlling lesser celandine early is usually possible without harming desirable wildflowers since most have not emerged yet. Garlic mustard is a biennial. The rosettes of leaves from last year are now growing vigorously and can be treated with an herbicide or hand pulled. Once they flower (in a few weeks) they can also be pulled, but must be destroyed rather than thrown back on the ground because the seeds will mature, spreading the plant, even if the plant has been pulled up.

Winter annual weeds are up in full force. Pull, spray, or hoe out weeds including hairy bittercress, mulberry weed, and others before they get larger and produce mature seed.



Lesser celandine in bloom.
Photo credit: Carrie Murphy

For more information

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

Helpful numbers to know:



Garden Line	831-8862
(for home gardeners only)	
New Castle County Extension	831-2506
Kent County Extension	730-4000
Sussex County Extension	856-7303

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

Diseases (Continued)

while for soil to dry, and for new root development to occur. Do not fertilize during this recovery period. Take note of problem areas and try to improve drainage by adding organic matter, or changing the slope. Gardeners in the coastal areas that experience **salt water intrusion** on lawns should irrigate with fresh water to move the salt through the soil profile down below the root zone of the plants affected. For this, good drainage is important. If you are worried that the salt levels are too high for good plant growth, a soil test from the UD Soil Testing Program can be done to determine soluble salt levels. Salt spray can also adversely affect trees and shrubs. Little can be done for this type of salt damage, but if plants were otherwise in good vigor they should recover. For this reason, the “right plant, right place” rule is important, because plants in coastal areas will periodically be exposed to high salt levels and salt spray, as well as winds.

Annuals in pots and packs in retail locations may come with diseases or pests. Take a careful look before purchasing, and look at root systems if possible. Roots should be visible and healthy white in color. Pick off any leaves with obvious mold.



Flooded soils can lead to compromised tree roots. Photo credit: Bugwood

GROWING DEGREE DAYS
AS OF March 22, 2016

- Swarthmore College (Delaware County, PA) = 69 ('15 = 9)
- Fischer Greenhouse (New Castle County) = 56 ('15 = 6)
- Research & Educ. Center, Georgetown (Sussex County) = 71 ('15 = 18)

Editor: Susan Barton
Extension Horticulturist



Rust mite shed skins. Photo credit: Loraine Graney, Bartlett Tree Experts, bugwood.org