

# ORNAMENTALS

• H O T L I N E •

## INSECTS

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Issue 15

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THE TWO-SPOTTED SPIDER MITE, *Tetranychus urticae*, is increasing now that our cool spring is past. It is a pest of landscapes and greenhouses, attaching roses, *Euonymus*, *Baptisia*, dogwood, pear, butterfly bush, marigolds, cannas, viburnum, chrysanthums and many others.

Spider mites inject their mouthparts into plant cells and suck out cell contents causing a flecking or stippled appearance to the plant. Heavy infestations build webs, decrease plant vigor, and can cause premature leaf drop. Two-spotted spider mites feed on the underside of the leaves, are yellowish green with a spot on either side and adults are active 437 - 3518 [1894 peak] GDD. *Viburnum dentatum* is in full bloom when adult activity resumes. Females lay an average of about 140 eggs when temperatures exceed 80°F and a generation can be completed in a week. This species of mite prefers hot and dry conditions.

Sample for spider mites by shaking plant material over a clipboard and white sheet of paper. Mites will appear as rapidly moving dots and will smear when smashed. Sample at least every other week during the summer. Look for stippling on leaves or webbing, which is found on heavily infested plants. The participants on our pest walk noticed some stippling damage on roses in the UD Botanical Garden last week.

Spraying plants with a strong stream of water dislodges some mites and provides relief to water-stressed plants. Predatory mites and other predators feed on two-spotted spider mites, but they may have difficulty keeping populations low under ideal conditions. Horticultural oil, Hexygon, Floramite, and Forbid are some of the miticides available providing excellent mite control

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## DISEASES

Nancy Gregory  
Plant Diagnostician

BLUE SPRUCE, *Picea pungens*, is a popular evergreen tree used in residential and commercial landscape plantings, often as a specimen or solitary tree. Blue spruce is native to the western U.S., and grows best in well drained, fertile soil. Often used as Christmas trees and dwarf cultivars are suitable for smaller sites.

DISEASES OF BLUE SPRUCE include Rhizosphaera, a fungal needlecast which infects new needles in spring. Symptoms occur in late fall or in spring one year after infection. At that time, dark fruiting bodies on the stomates of infected needles are visible with a hand lens. Fruiting bodies appear as black dots in rows on either side of the midvein on the underside of the needle. Symptoms first appear as yellowing of needles, which later turn

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## What's Hot!

Brown patch is beginning to show on turf, with warm overnight temperatures and high humidity.

Insects (Continued) with minimal effects on natural enemies. Other miticides available include Avid, Kontos, and Sanmite among others. Pyrethroids and Merit (imidacloprid) are documented to cause increases in mite populations. Use these products only when necessary and closely monitor mite populations after application.



Two-spotted spider mite. Photo credit: Frank Pears, Colorado State University, bugwood.org



Two-spotted spider mite damage. Photo credit: B. Kunkel

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/>

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COOPERATIVE EXTENSION

## Diseases (Continued)

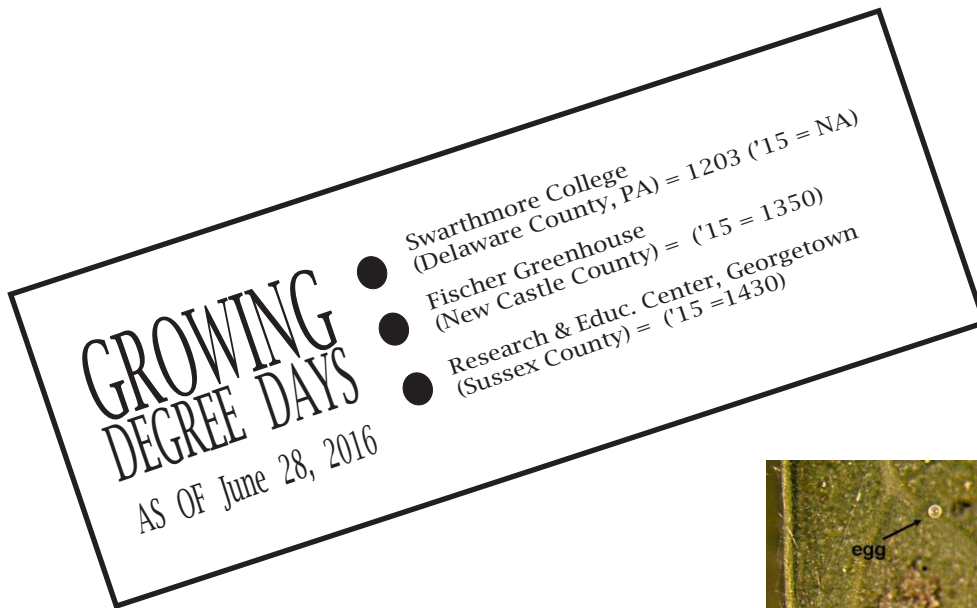
purplish-brown and drop from the tree. A few of these infected needles may persist on the tree over the winter and drop off the following spring. Because of the long delay between infection in spring and needle drop the following summer, the ends of infected branches often appear green and healthy. Trees lose their second year needles on the inner branches, and trees affected over three or four years may die. Norway spruce is more resistant than Colorado spruce, and white spruce is susceptible. Fungicide sprays with chlorothalonil are effective at protecting new growth when needles are ¼ inch expanded, with a repeat spray 10 days later. Stigmina needlecast looks similar, but fruiting structures are fuzzier, which can be differentiated with microscopic examination. Spruce needle rust is another fungal disease that blue spruce is very susceptible to, with yellow bands on current year needles, and orange rust spores erupting the following spring. Fungicide sprays should go on at bud break and weekly for three to four sprays. It may take several years to gain control of these needlecasts. Older trees may be infected with *Leucostoma*, the fungus that causes Cytospora canker, which comes in on wounds on drought stressed trees. Lower branches die and resin flow is prolific on the trunk and main branches. Prune to save the tree and reduce stress.



Rhizosphaera on spruce. Photo credit: N. Gregory

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Editor: Susan Barton  
Extension Horticulturist



Two-spotted spider mites with mate guarding and eggs. Photo credit: unknown