Cooperative Extension

ORNAMENTALS

• H O T L I N E •

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Issue 19

INSECTS

Brian Kunkel
Ornamental IPM Specialist

TWO SPOTTED SPIDER MITES. Spider mites should be less troublesome than past years, since spider mites prefer hot, dry conditions and we have had so much moisture. The two-spotted spider mite, *Tetranychus urticae*, is a pest of landscapes and greenhouses. Plants attacked by two-spotted spider mites include: 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. Females lay an average of about 140 eggs when temperatures exceed 80˚F and a generation can be completed in a week.

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. Also look for stippling on leaves or webbing.

Spray plants with a strong stream of water to dislodge some mites and provide 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 that provide excellent mite control 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.

DISEASES

Nancy Gregory
Plant Diagnostician

SOIL MOISTURE can have a big effect on plants, and this season, we have had rains that have come several inches at one time, alternating with periods of 5-7 days with no rain. Fluctuations in moisture and saturated soils even for several days can result in above-ground symptoms that may often be confused with plant diseases. Some of those symptoms include: chlorosis and leaf discoloration, smaller than normal leaf size, oedema (blisters on the leaf surface), epinasty (downward bending of the leaf petiole), leaf drop, marginal leaf scorch, reduced fruiting, stem swelling

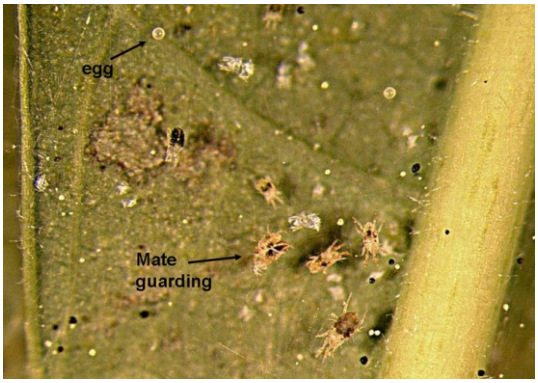
(Continued)

What's Hot!

Powdery mildew on crape myrtle is evident in the landscape at bloom. Trim out worst affected. Fungicides such as myclobutanil will protect newer blooms.

(Continued)

Powdery mildew on blooms of crape myrtle. Photo credit: Nancy Gregory



Two-spotted spider mite eggs and guards. Photo credit: Brian Kunkel

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 more pictures at http://sites.udel.edu/ornamentals/

Diseases (Continued)

(especially in small annual plants), twig dieback, wilt, root death, and plant death. Saturated soils can be harmful, due to the lack of oxygen in the soil spaces. Roots cannot develop well without oxygen, and normal uptake of water and nutrients is affected. Even after soil drains and is no longer saturated, root systems that have been injured or compromised may not recover. On the other hand, in dry soils, there is not enough water and similar symptoms may develop. In soils with fluctuating moisture levels, pathogens such as *Pythium*, *Phytophthora*, *Rhizoctonia* and other microorganisms may become established in stressed plants, and many pathogens are favored by excess water. Some plants can tolerate wet feet better than others, so proper site choice is important when planning landscape plantings. In general, deciduous trees can tolerate wet soils better than evergreen species. A Penn State fact sheet listing plants that are tolerant of wet sites may be found at: http://extension.psu.edu/plants/gardening/fact-sheets/trees-shrubs/trees-shrubs-and-groundcovers-tolerant-of-wet-sites.

What's Hot (Continued)

Register for the upcoming 2015 Summer Turf and Nursery Expo to be held at Buena Vista Conference Center in New Castle, DE on Wednesday, August 19. For information about the program and to download the registration brochure go to: http://www.dnlaonline.org/programs/industry_conferences.php. For questions, contact Valann Budischak at (888)449-1203.

Editor: Susan Barton
Extension Horticulturist

Two-spotted spider mite nymph. Photo credit: Brian Kunkel

GROWING DEGREE DAYS

AS OF August 4, 2015

- Swarthmore College (Delaware County, PA) 2247 = ('14 = 2031)
- Fischer Greenhouse (New Castle County) = 2261 ('14 = 2027)
- Research & Educ. Center, Georgetown (Sussex County) = 2361 ('14 = 2038)