



Greenhouse TPM/IPM Weekly Report
University of Maryland Cooperative Extension
Central Maryland Research and Education Center

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Amanda Laudwein, Joanne Lutz, John Speaker, and Marie Rojas (Independent IPM Scouts)

June 8, 2007

Procrastinator's Pest Management Conference
Montgomery College
June 15, 2007

VA Categories: 3A, 3B, 5A, 10, 60
MD Categories: II, IIIA, IIIC, V, VI, X (also covers private applicators)
DC Categories: 3A, 3B, 3C, 5
MD: 2 available Nutrient Management CEU's offered

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Dodder

John Speaker reported seeing large areas of dodder in areas of Montgomery County last week. Dodder can be a problem in landscape areas if left unchecked and allowed to flower. Last summer we visited a cut flower operation that had dodder growing directly outside of their high tunnel. Dodder is an annual vine with thread-like stems that are yellow, orange or red. It is a parasitic plant with roots that are modified to penetrate the host plant. Flowers are small, white or sometimes pink and numerous in compact clusters. Plants die at the first frost, but seeds will germinate the next year in spring and early summer. The seed is long-lived in the soil. Control dodder with a pre-emergent herbicide in early spring to prevent flowering and seed production.



Scouting Reports

John Speaker is finding flea beetles on physostegia and powdery mildew on asters. We are also seeing flea beetles feeding on hibiscus here at the research center in Ellicott City.



Aphids

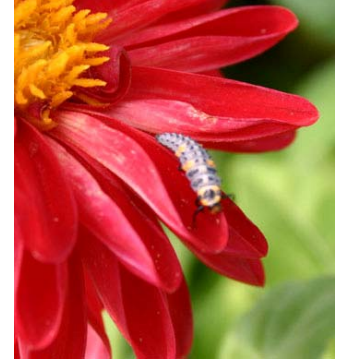
Joanne Lutz is seeing chrysanthemum aphids on chrysanthemum. Other scouts are finding aphids on 'Profusion' zinnias, thunbergia, marigolds, 'Blackie' and 'Margarite' sweet potato vines, and gazania daisies. Syrphid flies, aphid mummies, and ladybird beetle larvae were noted near these aphid colonies.



Chrysanthemum aphid



Aphids on marigold



Ladybird beetle larva is a predator of aphids

Spider mites

The hot dry weather has caused thrips and two-spotted spider mite populations to explode. Scouts are finding mites on trachelium, 'Blackie' and 'Margarite' sweet potato vines, 'Aztec' verbena, Mexican sage, passion flower vine, snail vine, and canna lilies. Because they have had problems in the past with burning cannas, they are considering releasing predatory mites.



Thrips

Scouts are seeing thrips on thunbergia, 'Stella de Oro' daylilies, double impatiens, fuchsia, portulaca, osteospermum, hibiscus, and 'Aztec' verbena.



Zinnias

We are seeing leaf spotting on 'Zowie' zinnias this week. Monitor your crops for bacterial leaf spot. Symptoms start as small water-soaked spots. The spots often have a yellow halo. As the disease progresses, the centers of the spots turn brown and papery. The diseased tissue may drop out producing a "shot hole" symptom. As spots coalesce the entire leaf may be blighted. The necrosis may eventually run along the veins, causing more leaf blight (seen on verbena and on ornamental kales and cabbage). Bacteria are produced on the surfaces of spots where they are easily splashed during rain or irrigation to cause new infections. Flower petals can also be blighted by bacterial leaf spot.



Management: Space plants and avoid overhead watering to reduce the spread of this disease. Once the crop is infected and showing symptoms, there is no effective method to eradicate the bacteria. Some chemicals can be used to reduce spread such as: Phyton27; Kocide; Aliette; Alude. Unfortunately, usually the best advice is to destroy the infected plants, or at least move them away from healthy plants and then treat them all. Bacterial diseases can be seed borne; one prevention method is to purchase clean seed or treat seed. Soaking seed a chlorine bleach solution has proven effective and did not greatly reduce seed germination.

Pesticide Applicator's Exam

The Community College of Baltimore County is offering a 7 week summer course on Pesticide Use and Safety at their Dundalk campus beginning on June 19. This class has been approved by the Maryland Department of Agriculture to meet part of the eligibility requirements needed to take the pesticide applicator's exam. For more information contact John Fitzpatrick, Horticulture Program Director, at 410-285-9754 or jfitzpatrick@ccebcmd.edu. Check your local community college for similar programs being offered in your area.

High Tunnels

We held a high tunnel program for cut flower growers on May 31 in Montgomery County. Growers from Maryland, New York, Pennsylvania and Virginia attended and exchanged information. If you are not presently growing in high tunnels consider looking at what the benefits would be to your operation. You can construct a good quality high tunnel for around \$1.50 - \$2.00/ft² of production area, and it does not take long to pay for the tunnel if you have the market. This is a reasonable investment if you want to serve the early and late markets and produce a better quality product in the rest of the season. No doubt about it, you can generally generate more cash, compared to summer sales, from cut flowers in early spring or in October through December. **Depending upon the crop being grown, high tunnels can provide the added benefits of longer stem length, less disease occurrence, decreased pest pressure, and better overwintering.** If you're interested in learning more, you can obtain a copy of *The Hoophouse Handbook: Growing Produce and Flowers in Hoophouses and High Tunnels*, Edited by Lynn Byczynski, for \$15 at www.growingformarket.com. The next program for cut flower growers will be held in Salisbury, MD on July 24, 2007. For more information contact Ginny Rosenkranz at 410-749-6141 ext. 106 or rosnkrnz@umd.edu.