



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

From: Stanton Gill, Regional Specialist and Karen Rane, Plant Pathologist
Ginny Rosenkranz, Chuck Schuster and Brian Clark, Extension Educators
Suzanne Klick and Shannon Wadkins, Technicians, Maryland Cooperative Extension
John Speaker, Independent IPM Scout

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Bacterial Blight

Geranium bacterial blight, caused by *Xanthomonas campestris* pv. *pelargonii*, was observed this week. Symptoms of this important disease of geranium include small brown leaf spots, yellow and/or brown wedge-shaped areas on the leaves, and wilting and eventual plant death. There is no cure for infected plants – sanitation and early detection are the most effective management strategies. The pathogen can be spread through infected cuttings and splashing irrigation water, and can lead to significant losses. Because other diseases and disorders can mimic bacterial blight symptoms, it is important to have symptomatic plants checked by a diagnostic laboratory. More information on this disease can be found at the following



Bacterial Blight on Geranium

Penn State University website: http://www.ppath.cas.psu.edu/extension/plant_disease/bactbl_g.html

Chrysanthemum aphid, *Macrosiphoniella sanborni*

We received a chrysanthemum aphid sample this week. This pest is found only on chrysanthemum in the United States. It is shiny, dark red-brown to nearly black and prefers to feed on the stems and leaves.



Controls include: TriStar (actemiprid), Marathon, (imidacloprid), Endeavour (pymetrozine), Orthene (acephate), Azatin (azadirachtin), BotaniGard (*Beauveria bassiana*), Talstar (bifenthrin), and Astro (permethrin)

Pest on Ornamental Grass

We received panicum samples several weeks ago with insects feeding on the roots. They were producing white wax and being tended by ants. The plants were from a perennial grower who was having problems with root aphids. However, these insects were much larger and faster-moving than a root aphid. So, we sent a sample to the USDA Systematic Entomology Lab for identification. Gary Miller identified it as a member of the Membracidae (treehopper) family. Gary was unable to narrow it down to genus and species because the specimens were immature nymphs.



Membracid on Panicum

Treehoppers, leafhoppers, and planthoppers all belong to the order Hemiptera and suborder Auchenorrhyncha. However they are in different families (sort of like cousins). They all have sucking mouthparts and can be found on a range of host plants. Species range in color and shape and some nymphs produce wax. With the exception of potato leafhopper which is a key pest in nurseries, in general most hoppers do not cause enough damage to warrant control.

Fungal Leaf Spots

We're seeing a number of fungal leaf spots on samples submitted to the plant diagnostic lab lately. Abundant moisture, long leaf wetness periods, and crowded plants are most likely contributing to disease development. The movement of a leaf spot fungal pathogen from the lower leaves upward on the stem is evident in this photo. The oldest leaves are completely blighted, and younger leaves have progressively fewer spots. The leaves on the interior canopy will remain wet longer than those on the outer portion of the plant, and as we all know, fungi love moisture! This type of pattern is typical for fungal leaf spot diseases. In this case, increased plant spacing may have helped promote air circulation around the base of the stems.



Septoria Leaf Spot on Veronica

Protectant fungicides for Septoria leaf spot include: chlorothalonil, coppers and mancozeb.

Scouting Reports

With all the rain that we've been having, slugs continue to be a problem. Growers are also noticing more *Botrytis* and shorefly activity this week because of the weather. We are seeing aphids on hybrid lilies; foxglove aphids on dahlias; and powdery mildew, leafminers, and whiteflies on gerbera daisies.



Shoreflies on pentas foliage



Leafminers on gerbera daisy



Slug with feeding injury



Botrytis blight on marigold



Foxglove aphid on dahlia

Upcoming Programs

Procrastinators' Pesticide Recertification Conference

June 6, 2008

Montgomery College, Germantown

For more information contact: Chuck Schuster at 301-590-2807 or cfs@umd.edu

IPM for Nurseries and Landscapes

June 11, 2008

Allegheny College of Maryland, Cumberland

For more information contact: Derrick Bender at 301-724-3320 or dbender@umd.edu

Procrastinators' Pesticide Recertification Conference- Eastern Shore

June 13, 2008

Wye Research and Education Center, Queenstown

For more information contact: Ginny Rosenkranz at 410-749-6141 or rosnkrnz@umd.edu