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

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Chrysanthemums Flowering Early

Many greenhouse growers put out their mums this year withput pinching or without Florel applications. The cool nights of late July and August have made many of these mums set flower buds early. The result is that many mums are shorter than normal and the flowers will be opening at the end of August to early September. A couple of growers made multiple applications of Florel this season and their plants are still vegetative and appear to be larger in size. It is a tough call each season whether you should apply Florel or not. This season it would have been a good idea. Hopefully, early mum sales will be good.

White Rust on Chrysanthemums

Chrysanthemum white rust was detected in Delaware. Nancy Gregory, diagnostician at the University of Delaware Plant Diagnostic Lab, found chrysanthemum white rust, *Puccinia horiana*, on garden mums in July 2009 (go to http://ag.udel.edu/Extension/pdc/ for photos). The symptoms of white rust are yellow spots on the upper leaf surface, and raised, waxy bumps or pustules on the undersides of the leaves directly below the yellow spots. These bumps are tan or whitish in color, and contain the spores of the pathogen. Chrysanthemum white rust is a US quarantine pest, and thus all finds must be reported and eradicated. Recent evidence suggests that the rust pathogen may overwinter in infected hardy mums in the landscape. If you see chrysanthemum leaves showing white rust symptoms, contact the Maryland Department of Agriculture or the UMD Plant Diagnostic Laboratory.

Cutworms on Mums

We are receiving reports of cutworms damaging mums in both southern and western areas of Maryland. They are actively feeding during the early morning hours.
Control: Acephate, Pylon (not outside), Conserve or Acelepyrn (can be used in greenhouses and outdoors)

Photo of black cutworm by: Merle Shepard, Gerald R.Carner, and P.A.C Ooi, Insects and their Natural Enemies Associated with Vegetables and Soybean in Southeast Asia, Bugwood.org

Tangle Top – An Unusual Disease

We received samples of the ornamental grass little bluestem (*Schizachyrium scoparium* 'The Blues') in the clinic showing leaves that failed to unfurl completely, resulting in a bunchy appearance (photo on left). When examined closely, a black fungal stroma could be seen "gluing" the leaves together (photo on right). The fungal stroma is due to the fungus *Myriogenospora atramentosa*, which causes the disease with the descriptive name of "tangle top". This disease is relatively common on several wild grass species, but this is the first time we've seen it on a cultivated ornamental grass. The fungus survives the winter as hyphae in the buds of infected plants, and will infect new shoots the following spring. Because so little is known about managing this disease in nurseries, discarding infected plants is the best method of disease control. We're interested in knowing how extensive this disease may be in nursery production, so if you've seen symptoms like those in the photos, please contact Karen Rane (301-405-1611, rane@umd.edu).

Photos by Karen Rane

Grass with leaves that have not unfurled completely

Fungal stroma 'gluing' the leaves together

Beneficial of the Week-Scoliid Wasps

Article and photo by Brian Clark

Adult Scoliid wasps have been active in the Upper Marlboro area for over a week. These wasps will occur in large numbers over lawns looking for white grubs, especially the green June beetle larvae. There were large numbers of these wasps in my herb and cut flower trials (especially the basil) and cruising back and forth over the turf (ok, they were weeds). The wasp is about 1" in length and dark in color with a pair of yellow spots in the middle of the abdomen. The wings are dark blue to purplish black.

Like many parasitoids, the female locates a grub in the soil through chemical cues, stings it, and attaches an egg to the grub. The still living green June beetle larvae provide a fresh food supply for the developing wasp larva for about two weeks. The larva then spins a cocoon to overwinter and pupates in spring. The adult wasps emerge from May through October, with the population reaching its peak in August.

They can sting if handled, but control is not necessary. Large numbers indicate a white grub population is high, and turf areas should be monitored for grub control.

Tropical Plants for the Interiorscape Certificate Program
University of the District of Columbia Pesticide Safety Program
Thursdays, September 10 – December 17, 2009, 9:00 a.m – 12:15 p.m.

This fourteen week course is designed to provide the student with the ability to meet the challenges presented by interiorscape environments. Identification of display/conservatory plants and knowledge of their culture, pests, and diseases is the core information presented. Sessions on appropriate pesticides and their use and nutrient and substrate management are included.

This course is approved for use in lieu of the one-year experience requirement for District of Columbia and Maryland State Commercial Pesticide Applicator's Licenses: category 3C Ornamental Interior Plants (DC) and category IIIB Ornamental – Interior (MD).

For registration information contact:

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