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

From: Stanton Gill and Ethel Dutky, University of Maryland Cooperative Extension
Ginny Rosenkranz, Extension Educator, Chuck Schuster, Extension Educator, Suzanne Klick and Shannon Wadkins, Technicians, University of Maryland Cooperative Extension
Amanda Laudwein, Joanne Lutz, John Speaker, and Marie Rojas (Independent IPM Scouts)

September 14, 2007

Composting Materials for the Landscape and Nursery Industry
October 9, 2007
Chesterfield Farms and the Big Fish Grille, Crofton
For more information: 301-596-9413

Getting Green: Sustainable Energy Use for the Green Industry
November 8, 2007
Maryland State Fairgrounds, Timonium
For more information: 310-596-9413

Conference registration forms are available on-line at http://www.agnr.umd.edu/ipmnet

Harlequin Bug, ***Margantia histrionica***

We are still getting reports of harlequin bug damage on cleome and on ornamental cabbage and kale. Look for their distinctive black and white striped barrel-shaped eggs laid on the undersides of foliage.
Control: Neem, insecticidal soap, and synthetic pyrethroids like Talstar (bifenthrin), Astro (permethrin), or Orthene (acephate)

Bandedwinged Whitefly, *Trialeurodes abutiloneus*

We received an email this week from a grower who is finding bandedwinged whitefly on their 'Black & Blue' Salvia. They are migrating into greenhouses earlier than usual this year from field crops wiped out by the drought. The bandedwinged whitefly prefers to feed on soybeans and weeds, but will move into greenhouses as the weeds and soybeans dry down- usually in late-September to mid-October. Bandedwinged whitefly will feed on ornamental crops like cabbage and kale, asters, and poinsettia. We have also found them on petunia, geranium and hibiscus in previous years in the spring. Lance Osborne, University of Florida IFAS, says that whitefly are present in very high numbers on cole and cotton crops in Florida and Georgia now, but *Bemisia* is the main one being seen there.
Control: Control materials include Marathon, Safari, Celero, Flagship, Tristar, Judo, Astro, Talstar, Sanmite, Endeavor, Azatin.

Pansies

Ben Beale, Extension Educator in St. Mary's County, sent us this photo of boron deficiency symptoms on pansy. Boron deficiency can result in thick, puckered leaves and aborted growing tips. Boron can be added one or two times during production at rates of 0.5 oz Borax /100 gallons or at rate of 0.25 oz Solubor/100 gallons.

Boron Deficiency

We also had a grower bring in a pansy this week with interveinal chlorosis symptoms characteristic of iron deficiency. They were using a fertilizer especially formulated for pansies with extra iron and boron. Soil tests indicated that a high pH (6.8) was preventing proper iron uptake. Growers should maintain a pH below 6.0 to avoid problems with both iron and boron deficiency.

Iron Deficiency

Easter Lilies

To grow good lilies, you must pre-cool (vernalize) the bulbs. The cold treatment triggers biochemical changes, stimulating floral induction and causing earlier and more vigorous flowering once the plants are moved into a warm greenhouse. Easter lily bulbs usually receive 6 weeks of cold treatment at 40 - 45 °F. Easter is very early next year on March 23, 2008. Your bulbs should begin receiving their vernalization treatments in early October.

Blister Beetles

Marty Adams brought in short-winged blister beetles (also referred to as oil beetles) that were feeding on Hellebore 'Sun Marple' last week. In the past he has also seen this beetle damage clematis. The larvae of these beetles, in the genus *Meloe*, live in bee nests and feed on the eggs of bees. The adults are not able to fly so most are found on the ground or feeding on the lower foliage of plants. When threatened, this beetle will exude an oily substance from their leg joints. This oil is known to cause blisters to skin so avoid handling the beetles.
Control: Control is not necessary.