



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

**August 10, 2007**

**ASCFG Mid-Atlantic Regional Meeting**  
**August 27, 2007**

**Location: Wollam Gardens, Jeffersonton, VA**

**Schedule and Registration Form Available at:**  
**<http://ascfg.org/images/stories/mareg07.pdf>**

**For More Information Contact:**  
**440-774-2887 or [ascfg@oberlin.net](mailto:ascfg@oberlin.net)**

### **Echinacea**

We are seeing problems on *Echinacea sp.* ‘Sundown’ this week. The leaves are becoming puckered and curling upwards. Ethel Dutky reports that this is being seen on this variety at many nurseries in this area and in other areas. The symptoms are similar to herbicide damage or a virus. Ethel submitted several specimens for virology testing and received negative results. The grower has assured us that no herbicides were applied anywhere near the growing area. In addition to the distortion, some of the leaves are becoming “crispy” and silvery in color- characteristic of scorching. Ethel and Rich Anacker believe that the symptoms may be an environmental stress response related to the recent heat. They are planning to conduct a trial at the Maryland Department of Agriculture’s greenhouses in Annapolis to see if this is indeed temperature-induced. Symptomatic plants will be placed in a cool greenhouse and the new growth will be monitored. If you are experiencing these same problems, please contact Rich at 410-841-5927 or [anackerh@mda.state.md.us](mailto:anackerh@mda.state.md.us).



### **Borer in Lobelia**

Last week we received a *Lobelia cardinalis* sample from Neenah Hoppe, Home Horticulture Educator and Master Gardener Coordinator in Queen Anne's County. She had a grower that was having problems with insects boring into the base of their lobelia stems and causing the plants to collapse.

The larvae were corn earworm, *Helicoverpa zea*.

This moth mainly damages corn ears, but has been reported to also damage several species of vegetables, cut flowers, and herbaceous perennials.

Two days later we were visiting a site in Ashton with a landscape manager. They had a large planting of lobelia in a wetland area, and we found more damage from the corn earworm there.

The larvae of corn earworm can range in color from pale green to pink to almost black but they have characteristic longitudinal rings on the body that are dark adjacent to light colored rings. They also have prominent black, raised spots on the body with spiny setae projecting from the center of the spot.

**Control:** When adult activity is high an application of a synthetic pyrethroid, Acephate (Orthene) or Conserve will control larvae before they bore into the stems



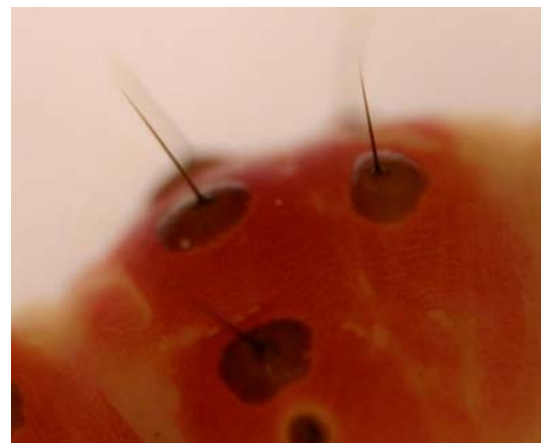
**Tunneling at Base of Stem**



**Damage to *Lobelia cardinalis***



**Corn Earworm, *Helicoverpa zea***



**Spiny setae projections**

### Harlequin Bug Active in August

The harlequin bug, *Margantia histrionica*, is actively damaging cleome, snapdragon, and newly planted ornamental cabbage and kale. They cause white spotting of the foliage that turns brown.

**Control:** Insecticidal soap, neem products, Orthene (acephate), synthetic pyrethroids



**Harlequin Bug Damage on Cleome**



### Mildews

The West Virginia Fruit experiment station reports that the weather has become ideal for downy mildew on fruit and vegetables. The downy mildews that hit vegetables come up on southern wind currents. David Clement of the Home and Garden Information Center commented that these hot, sunny days and cool nights are also ideal weather for powdery mildew development.



*Coreopsis grandiflora* 'Early Sunrise'

### Cabbage Looper, *Trichoplusia ni*

Brian Clark, Extension Educator in Prince George's County, is reporting that cabbage looper adults are active. The adult moths are grayish brown and have mottled wings with a silvery figure eight marking on each forewing. Monitor ornamental cabbage and kale for light green larvae with faint white stripes. Cabbage loopers may also feed on chrysanthemum, carnation, snapdragon, and nasturtium.



### Cucumber Beetles

We are seeing spotted cucumber beetles feeding on *Rudbeckia* 'Maximus' blooms in Baltimore County this week.



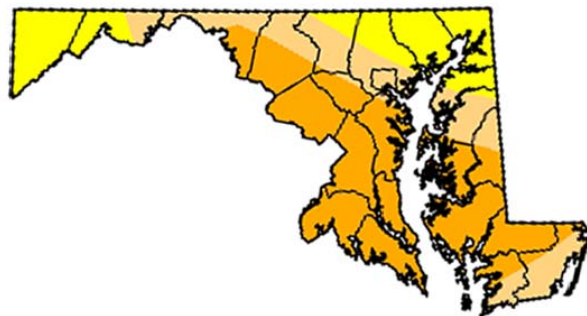
### Drought Update

Well, the rain came last week and again yesterday, but not to all areas. The average rainfall in the past two months has been far below normal. From June 1 to July 30, 2007 National Airport in Washington received only 3.78 inches of rain. Normally it is twice this amount. As we visit various landscape sites in central and western Maryland we are seeing plants with scorched foliage and severe dieback. Expect to have high losses of plants that were transplanted in the last 2 seasons unless they were kept well watered. We are including a map of which areas of the state are being hit the worst with this drought of 2007.

Map courtesy of Brian Fuchs, Drought Mitigation Center, US Drought Monitor, at [http://www.drought.unl.edu/dm/DM\\_state.htm?MD,NE](http://www.drought.unl.edu/dm/DM_state.htm?MD,NE)

*Intensity:*

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional



**Drought situation as of August 7, 2007**