



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

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July 24, 2009

Watch Out for Erwinia in Poinsettias

We have had couple of reports of bacterial soft rot, *Erwinia carotovora*, showing up on poinsettias in Maryland greenhouses. *E. carotovora* is found everywhere and attacks stressed and weakened plants. Often the problem starts because of how the cuttings are handled. Most cuttings are produced offshore and when they arrive in the United States they are cooled by third party companies before shipment. The trucks they are shipped in are cooled to keep the poinsettia cuttings out of stress. If the cuttings are not kept cooled enough at any stage in this process then they become stressed. When the cuttings arrive at your greenhouse, reach into the box to check the temperature of the poinsettia cuttings. If cuttings feel warm, take them out and cool them down using ice packs, by misting them or by moving them into your cooler and lowering the temperature to 50°F. If you have to stick the cuttings right away, soaking them first will help reduce the temperature stress. Watering the oasis cubes or substrate before sticking also helps reduce stress on the cuttings. Do not heat the greenhouse at night for the first 2 - 3 nights. Greenhouse temperatures of 80-85°F/ 26-29°C during the day and 72°F/22°C at night are optimum for poinsettia propagation. Shading the greenhouse to 1500 - 2000 foot candles/16,140 - 21,520 lux will help reduce temperatures and stress on the cuttings. Remove all infected cuttings from the growing area. If you can get the plants past the first 4 to 5 days, you are usually “out of the woods” with this disease.

Imported Cabbageworm

Caterpillars of imported cabbageworms are active this week on cabbage. Monitor the crop closely for small holes in the foliage caused by their feeding damage. Look on the undersides of the leaves for the small, early instar caterpillars.

Control: *Bacillus thuringiensis (Bt)* on early instar larvae or Conserve.



Damage from imported cabbageworm feeding



Early instar imported cabbageworm

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Late Blight on Tomatoes

Your customers might have questions about tomato problems this summer. Specialists with the Home and Garden Information Center (HGIC), visited several residential areas this week and saw quite a bit of late blight on tomatoes in home gardens. The recent hot and dry weather has limited the spread of this disease, but a little rain can cause this disease to flare up some more. HGIC has a fact sheet available at http://www.hgic.umd.edu/_media/documents/hg38.pdf



**Late blight photos from the Home and Garden Information Center,
University of Maryland**