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)

April 20, 2007

High Tunnel Conference and Tour **May 31, 2007** Montgomery County Extension Office, Derwood Farmhouse Flowers and Plants, Brookeville For more information: 301-596-9413	**Chesapeake Green Interiorscape Conference** **May 18, 2007** Brookside Gardens, Wheaton, Maryland For more information: 410-823-8684 Pesticide recertification credit available for MD, DC, PA, DE and NJ

Ants

Most ant species are a nuisance in greenhouse production. Two groups, the pavement ants and the fire ants are of concern when they move into greenhouse production areas. John Speaker found pavement ants in three greenhouses in Maryland this week that were damaging bedding plants. The ants had stripped the base of vinca stems **(see photo)** and chewed through landscape fabric at one location. Let us know if you see ants damaging crops in your greenhouse.

Photo by John Speaker

Pavement Ants

Pavement ants, *Tetramorium caesptium,* are native to Europe and were introduced to North America in the 1700s. They have spread throughout the east coast with the shipping of plant material and are continuing to expand their range. IPM scouts in Maryland have found these ants in several greenhouse crops causing loss of plant material. We have had positive identification of this ant species in Maryland damaging petunia, vinca, and pansy crops. The ants feed on the roots and girdle the stems of plants causing them to collapse**.** In 2005 we received samples of this species damaging petunias in hanging baskets.

Identification
The pavement ant is dark brown with light colored legs**.** They have 12-segmented antennae with a 3- segmented club. On females, the thorax has a pair of small spines on the dorsal side. The males do not have these spines. The pedicel (area between thorax and abdomen) is 2-segmented.
Control: DuraGuard ME has a label for use in greenhouses and nurseries and will control ants. Apply this as a soil drench.

Weather-related Problems
Keep a close eye on your crops for signs of stretching and *Botrytis* infection during extended periods of cloud cover. The rain and cool temperatures the last couple of weekends kept customers inside, and garden center sales suffered as a result. Everyone keeps repeating the phrase, "We need some sun!"

Growers are saying that because they shipped less than they had expected, overcrowding has become a real problem for them. Remember that improperly spaced plants that aren't receiving enough light will begin to stretch. Prolonged leaf wetness of crowded plants, due to decreased air circulation combined with a lack of sunlight, makes plants more prone to *Botrytis* infection**.**


New Guinea impatiens with *Botrytis*

We had a petunia sample in the lab this week with yellowed lower leaves. We suspected that these symptoms were the result of low nitrogen, Soil tests confirmed that the soluble salts were low. With all the cloudy weather we've had, growers are watering less and finding it difficult to get enough fertilizer on their heavy feeders like petunias. The good news is that it's supposed to be warm and sunny this weekend. So, if the roots are looking good, go ahead and fertilize.

Downy Mildew
We are continuing to receive reports of downy mildew on coleus this week. It is showing up on both seed-propagated and vegetatively-propagated plants.

California Pack Trials
For those of us who were unable to fly out to the west coast this week, Greenhouse Grower magazine has updated coverage of the 2007 California Pack Trials. To view photos and descriptions of new plant introductions, go to the on location at pack trials blog on their site at: http://www.greenhousegrower.com/bloggin/page.php?page=daily

A few items that caught our eye…

- Benary's 'Northern Lights Lavender' pentas which grows in cooler temperatures and is less pH sensitive than other cultivars.
- The Midi series by Northern Innovators features bicolored gerbera daisies.
- The Littletunia series by Danziger has very small flowers. They work well in 4-inch pots, and may be grown as an alternative to calibrachoa.
- Limbo and Mambo dwarf petunia series by Hem Genetics have had the gibberilic acids bred out, resulting in plants that do not stretch. The new color for Limbo is Rose Veined and Pink Morn for the Mambo series.
- S&G's Show Your Spirit marketing materials are a way to promote red, white and blue plantings for Fourth of July. The tags are printed with historical trivia about America.
- S&G's Bulbs in the Bottom promotion encourages consumers to plant pansies and bulbs at the same time. The biodegradable pot contains both for quick fall planting and lots of spring color.

Possible Conserve Resistance

Most greenhouse growers are using Conserve as the "pillar" of their thrips control program. John Speaker recently asked if there are documented reports of resistance of Western flower thrips to Conserve in the United States. We posed this question to the Ornamental Entomology ListServ to see if they knew of any growers who were having problems with Conserve not giving as effective control as in the past. The individuals who responded have seen a reduced efficacy of Conserve for thrips control and one person noted that improper pH can be part of the problem. For more information, see Loughner, Rebecca L. (1); Warnock, Daniel F. (1); Cloyd, Raymond A. (1). 2005. Resistance of greenhouse, laboratory, and native populations of western flower thrips to spinosad. HortScience. vol. 40, no1, pp. 146-149.

Follow-up on Pylon Label

We had a call last week on whether Pylon was labeled for use in greenhouses for thrips control. I checked with Olympic Chemical and they said they had a federal label for thrips control, but their early work was at a high rate. They are trying lower rates and will include this on the new label. I asked Jeff Dobbs of OHP to send us a write-up on the status of the new label.

Here is Jeff's Response…

Yes, we are adding WFT to the ornamental section of the Pylon label. It currently is there but only for greenhouse vegetables and the rates are per acre. Pylon has always had federal registrations for ornamentals at a rate of 10 to 20 fl. oz. per 100 gallons. We have avoided these high rates because when we first launched Pylon it was strictly a mite material at 2.6 to 5.2 fl. oz. per 100 gallons and the cost to use it for thrips was going to be expensive. We were also concerned with phyto issues at these higher rates. It seems to be pretty safe down at 10 fl. oz. and we are even looking at 5 fl. oz. (5 should offer good control but for a shorter period of time).