

Greenhouse TPM/IPM Report

Central Maryland Research and Education Center Ellicott City, Maryland

February 22, 2024

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Aphids on Ranunculus

If you are a cut flower growing Ranunculus in a greenhouse or high tunnel, monitor the crowns of plants closely for aphids. We had a sample a few weeks ago with an infestation. Plant growth was distorted and stunted. A good control option is Endeavor.

It is going up to 60 °F on Monday and aphid populations are going to skyrocket. Look at any cool season plants in high tunnels over the next few days for aphid infestations.



Distorted growth on Ranunculus was caused by aphids.

Photo: Suzanne Klick, UME



Close-up of an aphid causing the damage. Photo: Sheena O'Donnell, UME

PGRs on Petunias

By: Stanton Gill, UME, and Will Healy, Retired-Ball Horticultural Company

Many growers are getting their wave petunias started in February and want to prevent stretching of plants. So, what is the best options with PGR application. I referred to my old friend, Dr. Will Healy, for his suggestions.

From Will Healy:

Here are two options, using either Bonzi or Sumagic:

Wave petunias are an aggressive grower when fertilized according to recommendations (heavy feeders). Therefore, you have to use a drench to control stretch of the lateral shoots. We normally start with a 5 ppm Bonzi drench once the roots are elongated (plants can't be pulled out). Usually you need to apply a second 5-10 ppm drench about 3-4 weeks later when the lateral branches have started to stretch.

If you use a Bonzi spray the rates are 3-4 fold higher (15-40 ppm) so it is more cost effective to use a drench.

Sumagic rates are usually 50% of the Bonzi rate since Sumagic is a stronger PGR. It is also more effective than Bonzi.

With all PGR applications, how much feed (the higher the NH4 and P application rates=> promote more stretch) you apply will govern the frequency and PGR rate. PGR application is almost as much art as science.

Mealybugs

We had a sample a few weeks ago of banana leaves heavily infested with longtailed mealybug. It is important to correctly identify which species is present. Longtailed mealybug females give live birth. They do not lay the egg masses required for the lady beetle predator, *Cryptolaemus montrouzieri*, to be effective since this predaceous beetle lays its own eggs among the cottony egg masses of the pest mealybug (such as citrus mealybug). Lacewings are a general predator that feed on mealybug and can help suppress populations. Targeting mealybug nymphs before they reach the adult stage and have a heavy waxy covering helps increase the efficacy of contact insecticides.



This banana leaf is heavily infested with longtailed mealybugs.
Photo: Sheena O'Donnell. UME



Various stages of longtailled mealybug are feeding on this banana

Photo: Suzanne Klick, UME



Note the winged adult male of longtailed mealybug on this sample. Females are wingless.

Photo: Sheena O'Donnell, UME

Woody Cut Stems

By: Stanton Gill

I am aggressively pruning our fruit trees in February. It is a fine time to collect one-year old shoots of peach, nectarines, apricots, and plums to hold in the cooler and force them to sell in late May and June. We have sent several happy commercial cut flower growers off with bundles of freshly pruned wood this winter from our orchard. Generally, we hold our cut branches in 5-gallon clean buckets placed in a cooler at 40 °F. They are taken out in late May and June to force the blooms.

Last year, I published pictures of paw paw branches we started forcing into bloom. We are doing this again this winter with the pruned branches in February. The blooms on paw paw usually take about 3 weeks to open. When they first open, the blooms are green, before turning purple. They are a great cut woody plant. If you know paw growers, see if you can convince them to give you a few branches to force and try out in 2024.

Two others we started cutting and holding for later forcing are Aronia and Saskatoon serviceberry. Both have beautiful blooms for late forcing spring sales. Not a bad idea for Mother's Day sales.



Pawpaw blooms started to change from green to maroon within just two days this week. We should get more intense color as the week progresses.

Photos: Stanton Gill, UME

Michigan State University Greenhouse Disease and Insect Management Guides

You can find disease and insect management guides online at the Michigan State University website at https://www.canr.msu.edu/news/greenhouse_disease_and_insect_management_recommendations. Look at the website for the future 2024 guide.

Conferences

March 26 - 29, 2024

IPM Scouts' Training

Location: Central Maryland Research and Education Center, Ellicott City, MD

June 4, 2024

MNLGA Program: Focus on Garden Centers Location: Ladew Gardens, Monkton, MD

June 5 and 6, 2024 (previously scheduled for February/March 2024)

Biological Control Conference for Greenhouses, Nurseries, and Landscapes Location: Central Maryland Research and Education Center, Ellicott City, MD

June 20, 2024

UMD Extension and MNLGA Technology Field Day for Nurseries Location: Ruppert Nurseries, Laytonsville, MD

200 miles in Trapper in Transcries, 2 my tons vine, 1712

September 17 and 18, 2024 (rescheduled from March)

Cut Flower Program

Location: Central Maryland Research and Education Center, Ellicott City, MD and several tour locations in Howard County.

October 9, 2024

MNLGA Retail Day

Location: Homestead Gardens, Davidsonville, MD

Go to the **IPMnet Conference Page** for links and details on these programs.

Commercial Ornamental IPM Information extension.umd.edu/ipm

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