

August 22, 2024

From: Stanton Gill, Extension Specialist – IPM for Greenhouse and Nurseries, Central Maryland Research and Education Center, University of Maryland Extension  
Andrew Ristvey, Extension Specialist, Wye Research and Education Center, University of Maryland Extension  
Suzanne Klick, Technician, CMREC, University of Maryland Extension

## Caterpillars on Mums

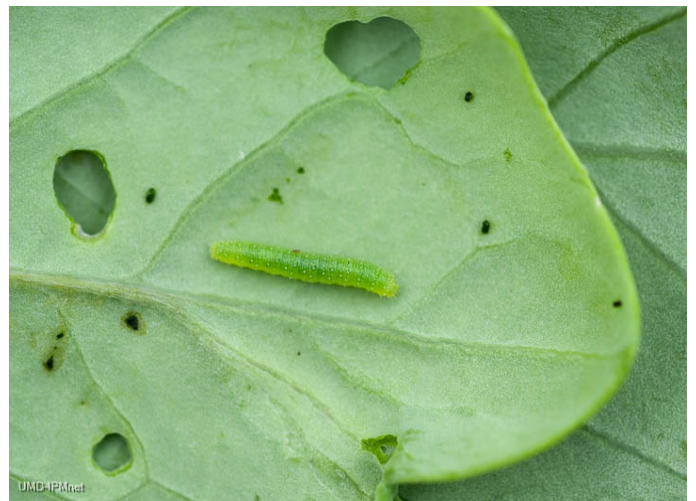
By: Stanton Gill

As we enter the last part of August, the moth pressure is growing. Check mums regularly for caterpillars. Also check flowering cabbage and kale since they are highly susceptible to several species of moths and butterfly larvae. Spinosad or *Bacillus thuringiensis* (Bt) do work but require close interval applications to be effective on early instar stages. Many growers are making soil drench applications of Mainspring and obtaining 6 – 8 weeks of control.



Look for yellow-striped armyworms feeding on mums.

Photo: Suzanne Klick, UME



Cross-striped cabbageworm (left) and imported cabbageworm caterpillars (right) are two species often found on cabbage and kale.

Photos: Suzanne Klick, UME

## **New Mainspring GNL Combination Product**

By: Stanton Gill

Nancy Rehcigl of Syngenta Company informed me that there is a new product called Mainspring Xtra. It contains cyantraniliprole. So where does the “Xtra” come from? The Xtra is thiamethoxam, the active ingredient of Flagship 25WG.

Both cyantraniliprole and thiamethoxam are systemic insecticides, but they have different modes of action (cyantraniliprole is a diamide, or IRAC 28, and thiamethoxam is a neonicotinoid, or IRAC 4A), and chemical and insecticidal properties. The combination is complimentary. Thiamethoxam provides fast activity and cyantraniliprole provides residual control. The addition of thiamethoxam also enhances cyantraniliprole’s activity on sucking insects, such as aphids and whiteflies.

## **Japanese Beetles Finished Up Activity in Mid-August**

By: Stanton Gill, Suzanne Klick, and Sheena O’Donnell

We just finished with trials comparing Mainspring at 4, 6, and 8 oz/100-gallon rates for Japanese beetle control. We also tested out BioWorks Epi-Shield, which acts as a repellent for certain insects. It gave good repellency for Japanese beetle feeding on highly susceptible *Tilia* trees compared to untreated control tree in our field trials. EpiShield is a miticide and insecticide and a blend of essential oils. It has a slightly peppermint odor to it. The oil must make the leaf surface unpalatable to the adult Japanese beetles feeding activity. We made the applications during the hot drought period of July, applying in early morning hours. We saw no phytotoxicity with the applications made in July of 2024. The EpiShielded treated plants showed very little beetle feeding compared to untreated control plants.

EpiShield is also exempt from REI or PHI restrictions, so growers do not have to pause production when mixing or spraying. It is reported to be very effective on killing Tetranychid mites and aphids. EpiShield, on aphids and mites, works on contact to generate pest paralysis, suffocation, and desiccation.

**Conferences** - Go to the [IPMnet Conference Page](#) for links and details on these programs.

### **September 25, 2024**

#### [IPM Diagnostic Session](#)

Location: CMREC, 4240 Folly Quarter Road, Ellicott City, MD 21042

### **October 9, 2024**

#### MNLGA Retail Day

Location: Homestead Gardens, Davidsonville, MD

### **October 16, 2024 (originally a September date)**

#### Cut Flower Program

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

The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by University of Maryland Extension is implied.  
Read labels carefully before applying any pesticides.

University programs, activities, and facilities are available to all without regard to race, color, sex, gender identity or expression, sexual orientation, marital status, age, national origin, political affiliation, physical or mental disability, religion, protected veteran status, genetic information, personal appearance, or any other legally protected class.

## NOTICE TO BENEFICIARIES AND PROSPECTIVE BENEFICIARIES

Name of Organization: **University of Maryland Extension**

Name of Program: **Commercial Ornamental Horticulture**

Contact Information for Program Staff: Stanton Gill, [sgill@umd.edu](mailto:sgill@umd.edu), 410-868-9400

Because this program is supported in whole or in part by financial assistance from the Federal Government, we are required to let you know that:

- (1) We may not discriminate against you on the basis of religion, a religious belief, a refusal to hold a religious belief, or a refusal to attend or participate in a religious practice;
- (2) We may not require you to attend or participate in any explicitly religious activities (including activities that involve overt religious content such as worship, religious instruction, or proselytization) that are offered by our organization, and any participation by you in such activities must be purely voluntary;
- (3) We must separate in time or location any privately funded explicitly religious activities (including activities that involve overt religious content such as worship, religious instruction, or proselytization) from activities supported with direct Federal financial assistance; and
- (4) You may report violations of these protections, including any denials of services or benefits by an organization, by contacting or filing a written complaint with the Office of the Assistant Secretary for Civil Rights, Center for Civil Rights Enforcement, Program Complaint Division by mail, fax, or e-mail at:  
  
**Mail:**  
United States Department of Agriculture  
Director, Center for Civil Rights Enforcement  
1400 Independence Avenue, SW  
Washington, DC 20250-9410  
  
**Fax:** (202) 690-7442  
**Email:** [program.intake@usda.gov](mailto:program.intake@usda.gov)
- (5) If you would like to seek information about whether there are any other federally funded organizations that provide these kinds of services in your area, please contact Latoya Hicks at [lhicks12@umd.edu](mailto:lhicks12@umd.edu).

This written notice must be provided to you before you enroll in the program or receive services from the program, unless the nature of the service provided, or exigent circumstances make it impracticable to provide such notice before we provide the actual service. In such an instance, this notice must be provided to you at the earliest available opportunity.

University programs, activities, and facilities are available to all without regard to race, color, sex, gender identity or expression, sexual orientation, marital status, age, national origin, political affiliation, physical or mental disability, religion, protected veteran status, genetic information, personal appearance, or any other legally protected class.