

**August 22, 2024**

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## **Caterpillars on Mums**

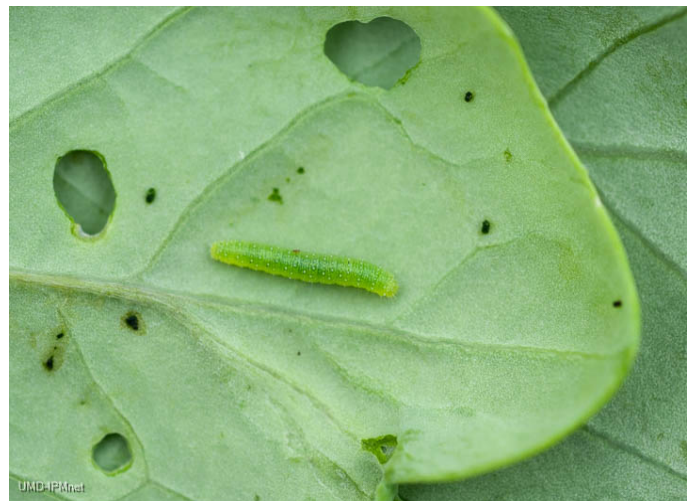
By: Stanton Gill

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

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