What’s Good for Whitefly Control on Poinsettias?

By: Stanton Gill, UME

For early in the season control of whiteflies on poinsettias I would recommend starting with Beauveria bassiana. The product is sold under the name BotaniGard. In Canada many growers are making water baths in which they place the BotaniGard and dip the poinsettia cuttings before sticking them in the greenhouse. We have done many trials with Beauveria bassiana over the years and found a fine mist application at 3 – 5 day intervals does a nice job early in the season in keeping whiteflies in check.

While attending the Cultivate 15 meetings in Columbus, Ohio I talked with the Monsanto reps about Met52. Metarhizium anisopliae (Met52) is now being sold by Monsanto BioAg Division. Four years ago we did some testing of this product for thrips and mite control in greenhouses and it was very effective. The product contains an entomopathogenic fungus called Metarhizium anisopliae. The product contains conidia of the fungus that are sprayed onto the insect and leaf surface. When the conidia get on the cuticle of the insect it germinates and forms appressorium infection structures, then the spores penetrate the cell walls of the insect by physical and enzymatic means. Protoplasts form in the hemolymph (insect blood) and kills the insect. Hyphae grow from the cadaver penetrating out through the cuticle to produce more spores which could infect other insects. It is labeled for use in the greenhouse and we have used it in mist propagation greenhouses with good success. It has performed well for control of tetranychid mites and western flower thrips. It is reported to work on whitefly, but we have not conducted tests on this pest.

For early season control of whitefly we have fond Distance or Talus IGRs (Insect Growth Regulators) are good methods for dealing with whiteflies.

For late season control of whitefly the material Rycar (SePro Company) has been tested on several poinsettia cultivars when in bract color stage. There has been no noticeable discoloration or damage to the bracts, so you have a product that can be used late in the season.
Interesting Plants from Cultivate 15
By: Stanton Gill, UME
One of the weirder and very popular plant combos this season was the potato/tomato grafted plant. I don’t see why it is so popular, but many garden center owners and greenhouse growers attending said they could not keep enough in stock in 2015. Basically it is a cherry tomato plant grafted on a potato. I guess the public like weird, novel stuff.

For cut flower growers there was a new stamen free, double flowering oriental lily called ‘Rose Lily’ and you can view it at www.roselilly.com. It is very attractive and lacks the stamens that drop pollen in people’s houses thus eliminating the mess.

We Love the Weird Ones
By: Stanton Gill, UME
Many have tried to send us the weirdest insects, but Andrew Ristvey of WYEREC wins with his recent entry. It is the wavy emerald moth caterpillar. This caterpillar takes petals off plants and attaches them to its back with silk to protect itself from predators and parasites. The wavy emerald moth caterpillar feeds on plants in the family, Asteraceae. Caterpillars regularly replace old and faded petals. They are harmless, but interesting.

New in Pesticides from the Ohio Meeting
By: Stanton Gill, UME
I sat in on a seminar on new chemistry. SePro Company has an interesting class of chemistry that they are calling "insect behavior modifiers". I had never heard of this term before so I asked their rep to explain it to me. He said when you apply the material to the foliage the insect that lands on the foliage and feeds will then start to wander around within 4 to 6 hours. It may flip on its back, but it does not die right away. It just stops feeding and keeps wandering around until it runs out of energy and dies. Evidently, the IRAC coding system does not have a class for this mode of action so the company is calling it the insect behavior modifier IBM (wow we better be careful with this acronym) until IRAC (Insect Resistance Action Committee) can come up with a new classification. It is not systemic, but it is translaminar in action. It looks good for controlling whiteflies, aphids, leafhoppers, chilli thrips and mealybugs. The product that is an insect behavior modifier is called Rycar and the chemical name is pyrifluquinazon. It is presently just labeled for herbaceous and woody plants in a greenhouse, but the company has plans to expand its use in the landscape and the nursery in the near future.

As mentioned above in the whitefly section, Met52 is now being sold by Monsanto BioAg Division. It has performed well for tetranychid mites and western flower thrips.
Interesting Way of Dealing with Bulb Pests
By: Stanton Gill, UME

At the Ohio meeting I had a chance to chat with Brent of Brent and Becky’s Bulb Company of VA. He mentioned that the Dutch used an interesting technique to control nematodes in the soil. When they finish with bulb production after a couple of cycles in a field, they flood the field with water and let it sit for a month or so before draining it. I spoke with Ko Klaver of the Dutch Bulb Company about this technique. He said that in bulb fields they not only build up nematode populations, but rodents become a big problem after a couple of years. They break a dike and flood the field with about a meter of water and let it sit. This flooding takes care of rodents and nematodes. They then do a practice they call “re-awakening the soil”. They pump out the water and dry the land out. The rodent and nematode populations are greatly reduced. Then, large quantities of compost are brought in and tilled into the soil to “re-awaken” it. They have been doing this technique since the mid-1990s. Ko said his uncle was one of the originators of this practice and it is now widely used in Holland. It is an interesting IPM approach to dealing with soil pests.

Twice-stabbed Stink Bug (*Cosmopepla lintneriana*)

Twice-stabbed stink bugs are active outside this week. Look for this bug on both landscape plants and cut flowers. This stink bug has a wide host range. In Maryland, we have had reports of it feeding on various plants that include cleome, snapdragon, physostegia and salvia. Damage includes aborted flower buds and distorted growth. This stink bug overwinters in the adult stage among dead leaves on the ground.

**Control:** If necessary, options include Talstar (bifenthrin) and Orthene (acephate)

A Predators of Aphids

A multi-colored Asian lady bird beetle was found this week next to its empty pupal case. Lady bird beetles are generalist predators that help keep aphids under control in the landscape and greenhouse.
New and Alternative Crops for Greenhouse and Nursery Growers
August 5 2015 (8:00 a.m. - 3:15 p.m.)
Location: Brookside Gardens, Wheaton, MD

Native plants: How to grow in the greenhouse from seed and cuttings. Dr. Sara Tangren, University of Maryland Extension, HGIC

Producing cut flowers and vegetables using hydroponics from a working greenhouse operation. Matthew Bauer, Flowers by Bauer, Harford County, MD


Hops as an alternative crops. Tom Barse, Stillpoint Farm

Ginseng: Is it green gold? Dr. Marla McIntosh, University of Maryland

Hydroponic fertility. Cari Peters, Peters Lab, PA

Growing native annuals and perennials for marketing as pollinator plants and to benefit beneficial insects and mites. Dr. Sara Tangren, and Stanton Gill, University of Maryland Extension

Tour of Brookside Production Facility. Joe Kraut, Head Grower, Brookside Gardens

To register:

2015 Cut Flower Tour
September 9, 2015
Location: Surreybrooke Farm, Middletown, 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.

Photographs are by Suzanne Klick and Stanton Gill unless stated otherwise.

The University of Maryland Extension programs are open to any person and will not discriminate against anyone because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry, national origin, marital status, genetic information, political affiliation, and gender identity or expression.