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From: Stanton Gill, Extension Specialist – IPM for Greenhouse and Nurseries, Central Maryland Research and Education Center, University of Maryland Extension

Karen Rane, Plant Pathologist, Director of the Plant Diagnostic Clinic, 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

Greenhouse Insect Update

By: Stanton Gill

Thrips:

Thrips are being picked up on gerbera daisy this week. Gerbera daisy is one of the first plants of the season to show thrips activity along with New Guinea impatiens. Look for small round droppings that are light green at first but darken to dark green to blackish color. Thrips are loving the weather this week with sunshine and warmth.



A thrips nymph was found on gerbera daisy this week

Broad Mites:

This distorted injury on New Guinea impatiens looks like damage we see from thrips or broad mite feeding. Cold damage can also produce a similar injury. We looked at the plants and did not find any mites or insects on the two plants samples.



A New Guinea impatiens with distorted foliage was examined for broad mites and thrips; none were found on this sample.

Powdery Mildew

By: Stanton Gill

We are finding powdery mildew active this week on hydroponically grown lettuce. Try to increase air circulation to decrease disease incidence with the warm, humid weather this week.



Monitor crops for powdery mildew when it gets warm and humid

Aphids- Watch Out

By: Stanton Gill

We are receiving in emails of pictures of melon aphids, foxglove aphids, and green peach aphids building up on lantana and fuchsia. Many growers are expanding the number of tomatoes, melons, and peppers plants grown in 2020 due to increased demand. All of these plants are magnets for aphids. Growers need to monitor closely for aphids at this time of year since they can literally explode in population numbers. This week's sunny warm weather is waking up the aphid population. Look for the white cast skins on the foliage, presence of honeydew. Most scouts use a clipboard to wrap foliage onto the clipboard and examine for aphids on the board.

Many growers push their plants to maximize growth with ammonia forms of nitrogen at this time of year to get crops through quickly and out the door. This practice serves to increase the birth rate (increased fecundity) of aphids since they benefit from the higher nitrogen levels. We have several good material for aphid control.

Microbial Insecticides

Fungus based and bacterial products offer a little softer control options. They often involve multiple applications and are generally slower than traditional chemistries.

BotaniGard 22WP/BotaniGard ES/Mycotrol ESO/Mycotrol WPO (UN) is an option we have used successfully. You must apply it with a fine mist application to make contact with the aphids. The good part is the label has many edible plants listed, which is the hot selling item right now. Requires three spray applications at three- to five-day intervals. Best tank-mixed with Azatin 0, Azaguard, or Molt-X.

BotaniGard WP offers greater plant and biological control agent (BCA) safety compared to the ES formulation. Mycotrol ESO and Mycotrol WPO are OMRI-listed.

Grandevo PTO (UN) – Label includes many edibles. Weekly spray applications at first sign of aphids continue for three weeks. OMRI-listed.

Other Choices

Aphids can develop resistance so it is a good idea to rotate between classes if using chemical control. Fortunately, there are several options. The IRAC chemical class is listed in () so you can rotate between classes.

Aria (9C) is a stylet feeding blocker and is translaminar so spraying on top of the leaf it travels to the bottom of the leaf and gives control for four weeks.

Endeavor (9B), like Aria, is also a stylet feeding blocker. It has up to three-week residual.

Enstar AQ (7A) –is an insect growth regulator (called IGR class) and interrupts aphid skin shedding process and prevents maturation. May burn some blooms.

Fulfill (9B) is a feeding blocker. Label includes many edibles and last up to three-week residual.

M-Pede (UN) is a purely contact control only. It has been known to burn blooms or tender growth. Often mixed with Azatin O, Azaguard, or Molt-X for best control. OMRI (Organic Materials Review Institute)-listed.

Rycar (UN) is contact and translaminar.

TriStar (4A) –is a contact and translaminar material with good bloom and plant safety.

New IPMnet Website

University of Maryland Extension is making changes to its website so the look of the IPMnet site will be different. URLs will be new, too. We will post the new link in a future report. The change is scheduled to take place in early April.

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.

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