

## **Greenhouse TPM/IPM Report**

Central Maryland Research and Education Center Ellicott City, Maryland

January 30, 2024

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

## **Easter Lily Crops**

By: Stanton Gill

Since Easter is March 31 in 2024, the Easter lily crop should be at the 4-5" green tip stage this week. This is the time when you space out the plants on the bench. Hopefully you have begun leaf counting and graphical tracking as soon as bud set is complete. Use temperature to control the rate of lily development & DIF to control height.ADT 65-70 °F.

Check foliage for aphids. We have several good materials for controlling aphids on lily crops. Keep bulbs on slight dry side to avoid bulb rots.

We are getting reports of outbreaks of bulb mites, *Rhizoglyphus* spp. The mites are usually associated with bulb rots and it is hard to discern if the mites or the bulb rot fungi are causing the dieback on top of the plant. Pull damaged plants and look for bulb mites at the base of the bulb. Bulb mites are difficult to control at this stage. Heat treating bulbs at 106.5 °F before planting usually kills bulb mites. this is not feasible this late in the season. We have released beneficial soil mites in the past. We did try *Hypoaspis miles* (*Stratiolaelaps scimitus*) releases with a fair to good level of reduction of the mites in trials over 14 years ago. It might be worth a try if bulb mites are a problem in your lily crop.

#### More on Easter Lilies

By: John Erwin, Department of Plant Sciences and Landscape Architecture

- 1) Drench with a combo fungicide for both Pythium and Rhizoctonia as a precaution on a monthly basis as a precaution. Combos that are popular and have good results include Subdue OR Aliette, PLUS either Cleary's 3336, Chipco 26109 or Medallion. This is especially important the last month prior to shipping and sales when plants are often spaced close.
- 2) Provide as much space as possible to plants close spacing encourages yellowing and drop of lower leaves.
- 3) Growers should be using a primarily nitrate based feed. Do not use 20-10-20. Rather, 15-5-15, 13-2-13 or 15-0-15 should be used to minimize elongation and increase postharvest life. A target electrical conductivity should be 0.75 1.5 uSM (exclusive of the EC in the water alone).
- 4) Use a morning drop in temperature from 5 a.m. 9/10 am (usually 7-10 °F) to reduce stem elongation without reducing leaf unfolding rate much. Generally, growers reduce heat starting at 4-4:30 am, and then let the greenhouse naturally heat up after 9 am to save on heating costs.

## **Longtailed Mealybug**

By: Stanton Gill

It is the dead of winter and this is the time of year when mealybugs tend to flourish in arboretums and some greenhouses. Suzanne and Sheena recently retrieved an incredible population of longtailed mealybug on an ornamental banana plant.

Mealybugs are one of the most challenging

greenhouse pests to control. They have a wide host range and high reproductive potential. They also have a tendency to hide in protected locations and spread easily on workers' tools and plant material, They can survive on greenhouse benches, in cracks and crevices without live plant material for up to 50 days (based on Sclar's work at Longwood Gardens in the early 2000s). All of these characteristics make them an extremely challenging pest to eradicate once introduced into a greenhouse operation. Mealybugs may be introduced into greenhouses on infested tropical, foliage, and succulent plant shipments. In greenhouses where mealybug susceptible plants are carried over from season to season, management is an ongoing challenge.

#### **Early Detection is Key**

As only the short-lived winged males fly, do not rely on yellow sticky cards to detect mealybugs. Early infestations can be easily overlooked due to the mealybug's tendency to hide in protected locations. Mealybugs can be difficult to find if populations are low. Look for cottony residues along the leaf midribs, on leaf or stem axils, stem tips and on the underside of leaves and near the base





can be difficult to find if populations are low. Look for cottony residues along the leaf banana. In the above photo (circled) is winged male.

Photos: Sheena O'Donnell, UME

of plants. If larger plants are staked, mealybugs can hide beneath the tape on the stake that is used to secure the plant. Adult females may crawl off plants and be found in brick crevices and under benches where they lay eggs.

#### **Potential Control Materials**

Brian Kunkel, University of Delaware Extension, and I have tested several materials on citrus mealybugs on coleus and found Mainspring, Altus, and Endeavor all gave good levels of control on treated plants.

## **Good Woody Plant for Winter Cut Stems**

By: Stanton Gill

Dave Clement and I were visiting a nursery in central Maryland on Monday. During our visit, we saw several specimen woody plants that would serve well for woody cut stems for cut flower growers.

One is a type of Japanese maple. This maple is *Acer palmatum* 'Sango Kaku', a coral bark Japanese maple. This plant can be grown as a large deciduous shrub, perfect for cut flower stem production. The nursery we visited was growing it as a small specimen tree with a single trunk. This plant offers year-round interest, prized for its coral-red bark that looks almost fluorescent and extends the season of interest throughout winter. We have been growing this tree at our farm in Westminster for the last 8 years, cutting stems for arrangements in January and February. The bright red stems are eye-catching.

In early spring, *Acer* 'Sango Kaku' blooms with attractive, but insignificant, reddish-purple flowers as it begins to leaf out with 5-lobed yellow-green leaves with plum to red edging. As the young leaves expand, they become light green-yellow and retain their color throughout the growing season. Flowers give way to winged samaras that ripen in early fall as the leaves begin to turn bright yellow and beautifully highlight the red twigs and branches.

Acer 'Sango Kaku' has an upright, bushy, rounded habit, a vase-shaped canopy, and a slow to moderate growth rate. Acer 'Sango Kaku' is a perfect specimen plant, or perfect for cut stem sales. Trained up as single trunk tree, it is an excellent specimen tree for landscape use. The red color works perfectly for Valentine's Day sales. I renewal prune our trees and fertilize with a calcium nitrate fertilizer in April to stimulate additional 1-year old shoots, which are a nice red color.



Acer palmatum 'Sango Kaku' coral bark Japanese maple is showing off its bright pink bark color.

**Photo: David Clement, UME** 

Low maintenance, coral bark Japanese maple grows best in a sunny to dappled shade location with organically rich, moist, well-draining soil, having an average to slightly acidic pH. It tolerates a wide range of soils, including sand and heavy clay, but high pH soils may result in chlorosis, a yellowing or blanching of the leaves. It is drought tolerant as well as rabbit and black walnut resistant.

## A New "Maryland" Fruit Tree

By: Stanton Gill

Well, we have a state dog which is the Chesapeake Bay Retriever, selected in 1964. Pennsylvania named the Great Dane as their state dog shortly afterwards in 1965. Maryland has a State insect, Baltimore checkerspot butterfly (*Euphydryas phaeton*), a black and gold butterfly that feeds on the white turtlehead plant. Pennsylvania has the state insect - the spotted lanternfly, which they shared with Maryland and Delaware. Just kidding Pennsylvania. Now, there is proposed legislation to name Maryland's official fruit. No, it is not paw paw - Ohio has that one. It is the persimmon that is being proposed as our Maryland fruit. Sen. Arthur Ellis, a Charles County Democrat, filed a bill to officially make persimmon another state emblem.

## Maryland Budget for 2025

ANNAPOLIS, MD – Governor Wes Moore today released the Moore-Miller administration's FY 2025 budget proposal. The \$63.1 billion plan. The governor's FY 2025 budget proposal shrinks the state's structural deficit by 34 percent, keeps the Rainy Day Fund balance at 9.4 percent, and flips the state's projected cash shortfall of \$1.1 billion to a positive cash balance of more than \$100 million.

#### **Proposals for University of Maryland**

Maryland will consider joining a number of states that guarantee admission to certain first-year students at one of the state's four-year public colleges and universities. Proposed legislation – Senate Bill 5, sponsored by Senate President Pro Tem Malcolm Augustine (D-Prince George's) — would require institutions to adopt an admission policy and accept Maryland high school students, from a public or private school, who are in the top 10% of their class.

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

#### **February 8, 2024**

25th Anniversary - Manor View Farm & The Perennial Farm Education Seminar Location: Valley Mansion, Cockeysville MD

Speakers: John Stanley (Green Industry International Business Consultant), Vinnie Simone (Planting Fields Arboretum, NY), Janet Draper (Smithsonian Gardens) & Stanton Gill (UMD Extension) Registration information available soon.

### February 14, 2024

Eastern Shore Pest Management Conference Location: Wicomico Civic Center, Salisbury, MD

**Information and Registration**: <a href="https://www.eventbrite.com/e/2024-eastern-shore-pest-management-conference-tickets-726283502507?aff=oddtdtcreator">https://www.eventbrite.com/e/2024-eastern-shore-pest-management-conference-tickets-726283502507?aff=oddtdtcreator</a>

#### February 15 and 16, 2024

Chesapeake Green Horticulture Conference

Location: Maritime Institute, Linthicum Heights, MD

## February 20 and 21, 2024

Drone Program - Focus on Mapping

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

#### June 5 and 6, 2024

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

# Commercial Ornamental IPM Information extension.umd.edu/ipm

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.