## MSU IN BLOOM

#### MSU HORTICULTURE GARDEN NEWS



PLANT GEEK SERIES

DAEDRE'S NEXT CHAPTER | STUDENT SPOTLIGHTS

MEMBERSHIP | COMMEMORATIVE BRICKS

CHILDREN'S GARDEN PROGRAMS

#### **GARDEN HAPPENINGS**

#### BY AMY MCCAUSEY. WEDDING & EVENT COORDINATOR



The Garden Showcase includes lunch\*, tours, and other garden activities, Garden Passport with a chance to win a complimentary 2024 Garden Membership.

\*Lunch for those registering on or after July 25 will be based on availability.

Parking is not included. Parking will be available in lot 54, 1066 Bogue St, East Lansing, MI 48824, lot 91, 953 Service Rd. East Lansing, MI 48824, or in the Wharton Center parking ramp.

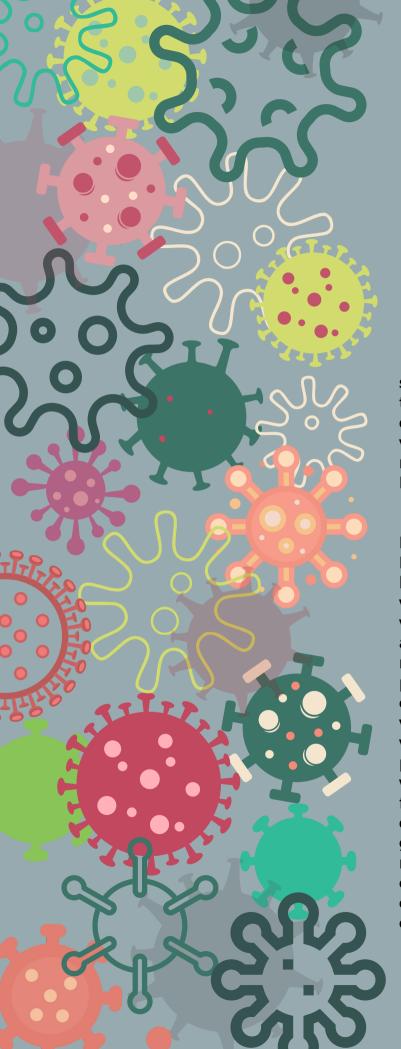
#### Register Now!

https://tinyurl.com/gardensshowcase



- Leisurely explore the Gardens and enjoy activities and learn about recent and future improvements being planned
- Interact with our student interns and horticulture staff
- Enjoy a picnic lunch in the Gardens
- Get your Garden Passport at registration and visit each station to be entered into a drawing for a complimentary 2024 Garden Family Membership!

Our Spring Plant Sale was a huge with record success breaking numbers and crowds. Thank you to all who visited the sale and all the volunteers who helped make this year's sale a success!



PLANT GEEK SERIES

### **GOING VIRAL**

BY DAEDRE MCGRATH
TRIAL GARDEN MANAGER

Welcome to part two of four in this Plant Geek series focusing on some niche horticultural topics that I think are fascinating. I hope you do to! This newsletter we're talking plant viruses, and down the road, we'll cover Latin nomenclature, and fasciation and reversion. Buckle up. We're about to get really geeky!

Between Coronavirus, Norovirus, and Influenza, I think most people have gained a better understanding of viruses and how they work in recent years. There are countless viruses that can infect humans and other animals. But did you know that there are also many viruses that infect plants? In our previous newsletter, I discussed the four types of variegation in plants, which included variegation caused by viruses. When certain viruses infect plants, they cause chlorotic patches of tissue (areas lacking chlorophyll), which create visible patterns on foliage. flowers, and fruit. Viral variegation can be detrimental because it often causes contorted growth and the infected tissues often become necrotic. Some viruses, however, add ornamental value to plants. Let's explore a few of the most common plant viruses you may encounter in your garden.

One of the most well-known plant viruses is tobacco mosaic virus (TMV). It affects tobacco, pepper, tomato, petunia (Photo 1), nicotiana, calibrachoa, verbena, and more. It causes mottled yellow patches on flowers, leaves, or fruit. It can stunt a plant's growth, but is not usually fatal. TMV can be spread from the hands of a tobacco smoker, or via viruscontaminated hands, clothing, or tools.

Hosta Virus X (HVX) causes mottled foliage that often becomes necrotic, as well as lumpy or twisted leaves (Photo 2). There are some Hosta cultivars known to be infected with HVX including 'Leopard Frog' (Photo 3), 'Lunacy', 'Eternal Father', 'Kiwi Watercolours', 'Breakdance', and 'Parkish Gold'. These varieties were originally thought to be new cultivars, but were actually just HVX-infected specimens of existing cultivars. Infected plants can spread HVX to unintended hosts, as can infected garden tools.

Canna lilies are susceptible to a number of viruses that all cause streaky chlorotic patterns, and necrosis between veins (Photo 4). I simply refer to the infection as "Canna virus", but in addition to two canna-specific viruses, there is actually a bean, a cucumber, and a tomato virus that can cause similar symptoms. Many canna cultivars have streaky foliage on purpose, so it can be difficult to identify. Do not save the tubers from infected plants- the virus does not simply "go away" during winter storage. Infected plants should be destroyed. Seed-propagated cannas are becoming more common because the virus cannot be transmitted through seeds.



Photo 1. Credit: OSU Plant Clinic



Photo 2. Credit: missouribotanicalgarden.org

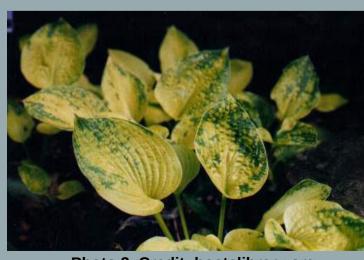


Photo 3. Credit: hostalibrary.org

Rose rosette virus (RRV) results in red or yellow mottling on rose foliage and contorted new growth resembling a witches-broom (photo 5). We had a number of roses removed from the gardens years ago because of suspected RRV infection. The virus is transmitted by mites feeding on the plant and may only affect individual canes or section of the plant. These mites can be blown around by the wind or transferred to other plants on gloves, clothing, or tools.

On a happier note, there are some viruses that add ornamental value to plants. Abutilon Mosaic Virus causes showy yellow stippling on Abutilon (flowering maple) foliage. Clerodendron Golden Mosiac Virus creates the heavily variegated golden foliage in Salvia 'Dancing Flame' (Photo 6). Perhaps the most well-known example of ornamental viral infection is with Tulip Breaking Virus (TBV). TBV is spread via aphids and causes flashy "broken" colors on tulip flowers (similar to Rembrandt and Parrot tulips, Photo 7). Tulips (and especially rare viral tulips) led to "Tulip Mania" during the mid-1630s in the Netherlands. Many Dutch families risked it all to purchase tulips to resell for profit. You could almost say that viral tulips "went viral." Eventually this tulip inflation resulted in an economic crash in 1637, putting many in financial ruin. Well, I guess this didn't actually end on a happier note, but do take comfort that modern "broken" tulip varieties were produced through traditional breeding and are virus-free.



Photo 7



Photo 4



Photo 5. Credit: provenwinners.com



Photo 6. Credit: msstate.edu



# MY HORTICULTURAL ORIGIN STORY: THE NEXT CHAPTER

BY DAEDRE MCGRATH

ACADEMIC SPECIALIST. MSU DEPT OF HORTICULTURE

Last August, our newsletter included a nine-page article called "My Horticulture Origin Story" (check it out here). The article was a synopsis of my life as a horticulturist, starting as a 6-year-old houseplant enthusiast, passing through my college years and jungle expeditions, and ending with my career at the Horticulture Gardens, where I have managed our trial program and annual garden for the last decade. Are you ready for a plot twist? Because my story is far from over!

I am thrilled to announce that I have accepted a position as a teaching faculty member in the Department of Horticulture at Michigan State University! My major responsibility will be teaching five undergraduate horticulture classes. In the fall, I will teach Introduction to Plant Science and also Principles of Horticulture. In the spring, I'll teach Landscape Design and will begin developing a new houseplant production course (to start in spring 2025). I will also coordinate Horticulture's international studies course, which is a two-week study abroad experience to explore horticulture in other countries (first trip planned for Summer 2026).

In addition to teaching, I will be helping with the department's student recruiting and communication efforts, as well as keeping tabs on the department's learning outcomes objectives (basically making sure our students are achieving specific curriculum objectives outlined by the department).

My departure from the Horticulture Gardens will be bittersweet. For 10 years, I have worked with amazing coworkers, volunteers, and students. I've grown approximately 450,000 plants and have been able to dabble in almost everything horticulture-related. I have gotten to grow and do some crazy things that very few people in the world get to experience. The gardens have been a playground that I will be sad to leave. Luckily, my new role will allow me to continue sharing the gardens I love with the next generation of horticulturists.

P.S. My office will still be in the Plant and Soil Sciences building, so I'm sure I'll still be running into many of you, our volunteers and garden members, in the future!

#### STUDENT SPOTLIGHT

#### BY AMY MCCAUSEY. WEDDING & EVENT COORDINATOR

Savanah comes from a Spartan family in the Saginaw area. She has been part of the wedding & event team for almost a year. Savanah graduated in May 2023 with a Bachelor's degree in Hospitality Business. She enjoys being part of many couples' wedding day and loves seeing the Conservatory lit up in the evening during events. Savanah has learned the importance of building relationships with clients and enjoys using her creative talents in the Gardens. Savanah is currently looking for a position on the west coast to start her career planning and executing music festivals.





Ella is an Environmental Biology student from Macomb, MI aiming for a career in Conservation & Bioremediation. This is her first summer with the Gardens. She started May 1 so at the time of my interview with her, she hadn't found any favorite areas of the Gardens yet. Her favorite plant is Echinacea. Her least favorite task is mulching and she is planning to graduate in 2025.

Andrew is a Horticulture student from Portland, MI. He started working in the Gardens in the fall of 2022 so this will be his first summer with us. Andrew's favorite space in the Gardens in the Arboretum and his internship project focuses on the Japanese Garden. His favorite plant is the Kniphofia (Red Hot Poker) and he doesn't enjoy watering. Andrew plans to run his own landscaping business after his 2025 graduation.



#### MEMBERSHIP HAS ITS BENEFITS

#### BY AMY MCCAUSEY. WEDDING & EVENT COORDINATOR

Do you love the Gardens or know someone who does? Why not become a member? Or give a membership as a gift! Membership has many benefits!

- Early access to our Plant Sales
- Discounts on your Plant Sale purchases
- · Discounts on our garden programming
- Free admission to 200+ American Horticulture Society reciprocal gardens across the country
- · And more!

You can renew or join online here: <u>www.hrt.msu.edu/join</u>. If you would like a brochure mailed to you, please contact <u>hgardens@msu.edu</u> or, 517-353-0443, or download one <u>here</u>.



#### SUPPORT THE GARDENS

#### BY AMY MCCAUSEY, WEDDING & EVENT COORDINATOR



Did you know that you can commemorate a loved one or special event in the Gardens? Consider purchasing a brick in memory of a special memory or event. The Gardens offers commemorative bricks in two sizes that can be engraved and permanently installed in one of several locations. Remember a loved one or special event each and every time you visit the Gardens. Find more information <a href="mailto:here">here</a>. If you would like a brick brochure mailed to you, please contact <a href="mailto:hgardens@msu.edu">hgardens@msu.edu</a> or, 517-353-0443. Purchases can be made <a href="mailto:here">here</a>.

### (URIOSITY (AMPS

#### Garden Writers Workshop July 11-13 from 10 a.m.-noon

Young writers will learn about the wonderful world of writing in the garden. Using the garden as their inspiration, campers will connect writing to nature by creating poems, stories, plays and much more. Ages 7 and up. (Limited to 20 participants). Registration required. \$50 for all three days.\*

### Be sure to register early!

Register at

www.canr.msu.edu/4hgarden/events/

### Stories for Sprouts & Seedlings from 10-11 a.m.

This program is designed especially for young children, ages 0-4, to experience the wonders of gardening and fun through stories and handson projects. **FREE.\*** 

May 17 — Couch Potato by Jory John

June 7 — How I Became A Pirate

by Melinda Long

June 21 — Where do Diggers Sleep at Night?
By Brianna Caplan Sayres

**July 12** — The Great Big Water Cycle Adventure by Kay Barnham

**July 26** — Houdini the Amazing Caterpillar by Janer Pedersen

**August 16** — You Can't Kiss a Bubble by Karen Wyle

**August 30** — Mr. Careys Garden by Janer Cutler

\*Event cost does not include parking

#### Camp Monet

#### August 1-3 from 10 a.m.-2 p.m.

Young artists will love spending three days in the gardens creating marvelous projects. Campers will use inspiration from the garden to make projects that involve sketching, painting, sculpting, dying, weaving and much more! Lunch will not be provided, so please bring a lunch each day. We will eat together in the garden. Ages 7 and up. (Limited to 20 participants). Registration required. \$85 for all three days.\*

### SPLENDIO STORIES

Stories in the Garden

June 14 from 10-11:30 a.m.

July 19 from 7-8:30 p.m.

August 9 from 10-11:30 a.m

Teens will be reading stories to younger children — a magical time of fun and learning.

Great for kids 0 to 100! FREE.\*

Stories in the Garden is a partnership between the East Lansing Public Library and the Michigan 4-H Children's Gardens. Interested teen readers should contact the East Lansing Public Library directly at elpl.org or by phone (517) 351-2420.

Sign up to be a reader soon!

#### IMPORTANT PARKING NOTE

Visitors during the week needing to park on campus will have a parking fee in addition to any registration cost to attend the event. You must park in a space designated as a "Pay by Plate" parking space. Signage has been installed in these areas. Parking spaces not marked as "Pay by Plate" may be reserved for faculty/staff permit parking. Parking in a space not designated as "Pay by Plate" parking may result in a parking violation. Immediately after parking, enter your license plate number and payment into the lot's SPOTON pay station or via the MSU SPOTON app. Pay stations accept cash payment or credit cards. They do not give change back nor are refunds issued for time paid for, but not used.



# FAMILY PROGRAMS SPRING & SUMMER 2023

### SUMMER FUN SERIES

Butterfly Day

April 29 from 10 a.m.-2 p.m.

Join us in celebrating another exciting season of "Butterflies in the Garden." Come and explore the secret life of butterflies in the Indoor 4-H Children's Garden. We will discover the amazing butterfly life cycle, create butterfly gardens to take home and much more. New This year! Explore science in the garden with MSU SciFest. There will be lots of hands on science fun! \$5 per child.

Garden Geocache Event

June 3 from 10 a.m.-1 p.m.

Cache veterans and new enthusiasts are welcome at this geocaching adventure. Bring your picnic lunch and enjoy a day of caching in the gardens. We will be finding new caches, trading travel bugs, exploring the gardens and much more. FREE.

Pirate and Pixie Garden Party June 15 from 10 a.m.-noon

Argh me mateys. Join us for a morning of swashbuckling fun! We will be going on a treasure hunt, making pixie dust, decorate an eye patch and much more! \$5 per child.\*

Digger Day

June 29 from 10 a.m.-noon

Come to the garden and explore the world of diggers. Front- end loaders, dump trucks and back hoes – all of these tools help with projects both big and small in our communities. MSU Infrastructure Planning and Facilities will bring some of MSU's biggest and best equipment to the garden for us to explore. We will also have activities and crafts. Come ready to dig and get dirty at this event! **\$5 per child.\*** 

Water Day

July 20 from 10 a.m.-noon

Come cool off from the summer heat and have fun in the garden with water. We will play water games, do water art and explore all things fun about water. Come ready to get wet! \$5 per child.\*

Bug Day

July 27 from 10 a.m.-noon

We cannot get enough of these amazing sixlegged friends! Join us for what has become an annual tribute to insects in the gardens. We will be collecting bugs, observing bugs and even making bugs! Our friends from the MSU Bug House will be back this year with their amazing collections of insects from all over the world! \$5 per child.\*

Bubble Day

August 8 from 10 a.m.-noon

Come celebrate the end of summer vacation at the garden with bubbles! As we explore the wonderful world of bubbles we will paint, eat and even make music with bubbles. Don't forget to invite your friends and family to come to this bubblicious bash! \$5 per child.\*

Garden 30th Birthday Party

August II from 10 a.m.-noon

We will celebrate the garden's pearl birthday with activities, and games. We will open the time capsule, eat cake and much more!!!.

FREE.\*

\*Event cost does not include parking.