

MSU IN BLOOM

MSU HORTICULTURE GARDEN NEWS



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GARDEN HAPPENINGS

What to Watch For



Keep your eyes open this spring for a new look for the Children's Garden pond.



Garden Events

Spring Plant Sale Saturday, May 20
Garden Showcase Friday, August 4

It's our 30th Anniversary!

This year we will celebrate our first 30 years. Look for special programming in our 30th Anniversary Newsletter coming in May.



The train is coming back this summer! Watch for the train in the 4-H Children's Garden in May.

STUDENT SPOTLIGHT

BY AMY MCCAUSEY, WEDDING & EVENT COORDINATOR

Students a why we are here

As you probably know, students are the reason we are here and we could not exist without them. Over the next few newsletters, I will be talking with our students so we can all learn more about them. Students are essential to the smooth operation of the Gardens. If you see any of our students in the Gardens this summer, stop and say hi!

Kat Garcia is a Horticulture major from Holland, MI. This summer will be Kat's second summer with us.

She will graduate in spring 2023. Kat's favorite garden is the Clarence E. Lewis Arboretum. She loves the pond located in the Judith Delapa Perennial Garden and the *Stachys byzantina* 'Lamb's Ear' that you will find there. Kat enjoys planting time each year and seeing the Garden come to life, she enjoys weeding the least. Kat's plans to stay on for the summer and then hopes to start her own cut flower business.



Kat Garcia



Eric Kalishek

Eric Kalishek is majoring in Games & Interactive Media and comes from Midland, MI. This summer will be Eric's first season with us. I actually caught him for this interview on his first day on the job! He's still getting his bearings and doesn't know yet what he likes most about the Gardens. Eric plans to graduate in spring 2025.



PLANT GEEK SERIES

VARIEGATION ORIENTATION

BY DAEDRE MCGRATH
TRIAL GARDEN MANAGER

Welcome to this four-part Plant Geek series, which will focus on some niche horticultural topics that I think are fascinating. I hope you do to! Over the next several newsletters we will cover: 1) Variegation, 2) Plant Viruses, 3) Latin Nomenclature, and 4) Fasciation and Reversion. Buckle up. We're about to get really geeky!

Variegated plants have areas of green tissue as well as areas of white, silver, or yellow tissue. Sometimes there are additional colors such as pink in "tricolor" varieties. Variegated plants are one of the hottest houseplant trends during the last few years. Some variegated plants can be quite rare, which naturally increases demand for these plants, as well as their price-tags.

Interestingly, variegation often leads to slower growth. Variegated plants often have less photosynthetic capacity compared to solid green versions of the same plant. The white areas of tissue lack chlorophyll, and less chlorophyll results in less photosynthesis. For this reason, pure white plants do not exist. I have encountered pure white seedlings many times, but they never survive to maturity because they cannot photosynthesize. Even a pure white leaf on a variegated plant has a low chance of long-term survival.

Growing variegated plants is often a balancing act. They can be more susceptible to sunburn. However, they also need high light levels to compensate for their lower photosynthetic capacity. When grown at lower light levels, variegated plants may start producing solid green new growth (called reversion, which we'll discuss in a future newsletter) in order to capture more light energy. Although it sounds like variegated plants have an automatic biological disadvantage, they do occur naturally in the wild.

There are four main types of variegation in plants. They vary in how they are produced by the plant, how stable they are, and how they are passed on from one generation to the next.

Natural/Pattern Variegation is genetically programmed, much like our eye color or hair color. The pattern can be consistent or random (but “consistently random”). The pattern is the same on all leaves on a plant and the same from one plant to another. Natural/Pattern variegation is passed on when propagated, so the offspring look exactly like the parents. Calathea and variegated Chlorophytum (spider plant, Photo 1) are examples of natural variegation. By the way, most of my examples are going to be houseplants, but variegation happens in garden plants too.

Blister/Reflective Variegation is caused by tiny air pockets between layers of leaf tissue. Light hitting these air pockets is reflected, creating a silvery appearance. Like natural variegation, blister variegation may be a consistent or random (but “consistently random”) and is passed on when propagated. Scindapsus, Peperomia argyreia (Watermelon Peperomia, Photo 2), Tradescantia zebrina (Wandering Dude), and some Anthurium all exhibit blister variegation.



Photo 1



Photo 2

Chimeral Variegation is caused by genetic mutation. Chimera is a term typically used to describe mythological creatures that are made up of body parts from various animals. However, chimeras are real! While incredibly rare, human chimeras exist, usually resulting from a twin embryo absorbing their sibling's cells while in the womb. And in the plant world, chimeras are very common! Chimeral plants are produced by genetic mutation, where one plant has areas of different genetic make-up. Some areas of tissue can produce chlorophyll, while others cannot. Chimeral patterns are random and can be quite unstable. Leaves on the same plant can have completely different patterns. Or, even a complete lack of pattern, as chimeral plants often produce solid white and/or solid green leaves. Chimeral variegation can be passed on to offspring, but only if the correct part of the parent plant is used for propagation. For example, snake plants (*Sansevieria*) can be propagated from leaf cuttings or stem cuttings (the stem of a snake plant is actually an underground rhizome, a type of modified stem). However, variegated snake plants are chimeras and their variegation can only be passed on through stem cuttings. A leaf cutting of a variegated snake plant (Photo 3) will produce new growth that is solid green. Variegated *Epipremnum* (*Pothos*, Photo 4), variegated *Monstera*, variegated *Alocasia* and *Colocasia*, and variegated *Sansevieria* are all chimeras.

Viral Variegation occurs when a virus infects the plant, causing chlorotic patches of tissue (areas lacking chlorophyll). Viral variegation can be detrimental causing necrotic tissue, but it can also create unique ornamental characteristics. Plant viruses are so interesting that we will discuss it separately in the next issue of our newsletter. **Stay tuned!**



Photo 3



Photo 4

STAFF FAVORITES

IN THE SPRING PLANT SALE

DAEDRE:

***Zinnia marylandica* 'Zahara Starlight Rose'**

If you have ever grown standard cut flower Zinnia (*Zinnia elegans*), you likely encountered a powdery mildew outbreak mid- to late-summer. Luckily, there is a species of Zinnia that is highly resistant to powdery mildew, *Zinnia marylandica* (photo 1). The marylandica-type zinnias form dense mounds covered in flowers. The Zahara series includes six single colors and two bicolors, including Starlight Rose, which was an All-America Selections (AAS) winner in 2010 and a Fleuroselect (European version of AAS) approved novelty variety. We have never offered Starlight Rose for sale before. Interestingly, the ratio of pink and white varies with environmental conditions.

***Thunbergia alata* 'Susie'**

We often get customers in our spring plant sale who are specifically looking for an annual flowering vine. Most annual flowering vines are very fast-growing and difficult to keep under control in the greenhouse. They tend to weave themselves through our greenhouse benches, as well as get terribly tangled up, so our selection is usually limited. *Thunbergia* (photo 2) is a great option, and one not seen often for sale. The unusual black eye on the flowers gives this plant its common name, black-eyed susan vine. *Thunbergia* flowers prolifically and will both climb and cascade, so best used in hanging baskets, window boxes, or grown up a trellis.



PHOTO 1



PHOTO 2

DAN:

***Capsicum annuum* 'Pot-a-peno'**

Pot-a-peno (photo 3) is a jalapeno pepper with a compact habit perfect for containers and hanging baskets. Plentiful small, green jalapeño fruits have a traditional spicy flavor. This variety is earlier to mature than other jalapenos giving you a head start on your garden's harvest. A unique trait of Pot-a-peno is how the fruit hangs down beneath the plant. A dense foliage canopy makes for an attractive addition to your patio or balcony garden.



PHOTO 3

***Capsicum annuum* 'Goddess'**

Goddess sweet banana pepper (photo 4) is a long, thick-walled, smooth fruit on large plants. Avg. 8-9" long, the fruits are mild when yellow and moderately sweet when they ripen red. Best for pickling due to their mild flavor, but also suitable for fresh eating.



PHOTO 4

***Capsicum annuum* 'Glow'**

Glow pepper (photo 5) is a beautiful orange, thick-walled mini bells. Deliciously sweet and fruity. 2-3 lobed, tapered fruits are 4-5" long. Medium-size plants yield well. Early and easy to grow in diverse climates. Like these for a mild salsa.



PHOTO 5 (LEFT)

***Capsicum annuum* 'Trailblazer'**

Trailblazer pepper (photo 6) is a bright yellow sweet bell pepper with thick three to four lobes. Holds onto yellow color for a long time before transitioning to golden orange. Great flavor and good for stuffing.



PHOTO 6 (RIGHT)

DAN (CONT):

***Ocimum basilicum* 'Elidia'**

Elidia basil (photo 7) has very large glossy green leaves. Has shown to be slow to early bolting (flowering/setting seed) and more resistant to some of the diseases coming into basil plants. Lots of leaves for pesto and drying.



PHOTO 7

BETHANY:

That's it – I'm accepting it. I am a daring horticulturist. And this year, I'm going to embrace it. While I can admit to taking some risks when it comes to growing, it's time to dive in. I constantly find myself daydreaming of color schemes, and textural differences, and incorporating plant combinations that express my inspirations from my travels and lived experiences. I want the landscape to evoke emotion or a type of spirit. I want you to get lost as you stumble upon a living installation – a community that is alive. Sometimes, that means we choose plants that seem 'out of the ordinary', or that may seem risky. It's okay – a part of being daring is being brave, and with this comes experience. These are the plants that have been a part of my daydreams. They will be featured in our gardens this year and will be available at our spring plant sale.



PHOTO 8

***Agastache x hybrida* 'Arizona Sandstone'**

For the daring! Technically zone 6, so if you're unable to provide some protection, or lack any type of microclimate, this may not be the plant for you. However, I have had very little problems both in Lansing and on campus growing zone 6 plants. 'Arizona Sandstone' (photo 8) is an orange-flowering variety that stands at about 8-10" tall. It's got all of the same textures we are used to in Agastache, in a compact form. Get funky and pair with varying colors, like silver, light blue, pink, or yellow.

**ALL THESE
PLANTS &
MORE
AVAILABLE
MAY 20!**

BETHANY (CONT):

***Echinacea* 'Green Jewel'**

I get a lot of flak for liking colors that are possibly considered 'muted'. But, these colors find wonderful spaces in your garden by working as an accent to other plants in your designs. 'Green Jewel' (photo 9) has light green flowers that will help a lot of your other plants pop, while providing an unusual color for a coneflower. You'll also get excited when visitors to your garden notice it as well – purely because it's different. If you're an *Echinacea* nerd like I am, you'll definitely want to give this variety a try.



PHOTO 9

***Rudbeckia occidentalis* 'Green Wizard'**

Okay, so, do you ever notice plants with weird characteristics? Like, it seems to be missing its petals? I do, too. And I'm immediately attracted to anything that gives off a different sort of vibe. That's what has me so excited about *Rudbeckia* 'Green Wizard' (photo 10) - a taller variety standing at 3-5 feet tall, with rayless flowers and dark centers. Grown from seed here at the gardens, we have a good number of these available for sale. If you have the room, I recommend trying a few. This *Rudbeckia* is not drought tolerant and prefers consistently moist soils.

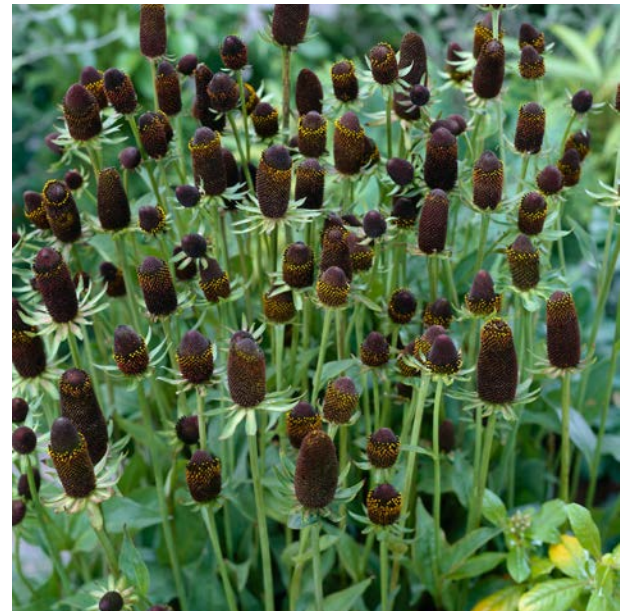


PHOTO 10

Don't forget to renew your membership for 2023 or become a first-time Garden Member before the Plant Sale! Details on how to renew and join are on page 11.

A poster for the MSU Horticulture Gardens 2023 Plant Sale. The background is a light purple/pink color with a pattern of faint floral designs. The text is in white and pink. The main title is 'MSU HORTICULTURE GARDENS 2023 Plant Sale'. Below that, it says 'FRIDAY, MAY 19 4-7PM (*2023 GARDEN MEMBERS ONLY)' and 'SATURDAY, MAY 20 7-2PM (PUBLIC SALE)'. The address is '1066 BOGUE STREET EAST LANSING, MI 48824'. There is a quote: 'Great deals on hanging baskets, perennials, annuals, grasses, herbs, vegetable seedlings, shrubs, and more!'. At the bottom, it says 'FOR MORE INFO VISIT: HRT.MSU.EDU/GARDENS'. The Michigan State University logo is at the bottom right, along with the text 'Horticulture Gardens'. A small disclaimer at the bottom left reads: '*2023 MSU Garden Members receive 10% off Plant Sale purchases. This postcard does not entitle you to a garden membership.'

MSU HORTICULTURE GARDENS
2023 Plant Sale
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Great deals on hanging baskets, perennials, annuals, grasses, herbs, vegetable seedlings, shrubs, and more!

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MICHIGAN STATE UNIVERSITY Horticulture Gardens



Support the Gardens

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 and programs
- Free admission to 200+ American Horticulture Society reciprocal gardens across the country
- And more!

Membership has Benefits

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

Did you know that you can commemorate a loved one or a 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 [here](#). If you would like a brick brochure mailed to you, please contact hgardens@msu.edu or, 517-353-0443. Purchases can be made [here](#).

Commemorative Bricks



Volunteer

Do you love plants? Do you love to garden? The MSU Horticulture Gardens staff relies on a dedicated group of volunteers who help us accomplish many tasks each year. No experience is necessary - though you may find new ways to use your skills to help!

- Weekly volunteer days
- Daily welcome booth
- Annual volunteer field trip
- Annual volunteer appreciation dinner

To learn more, visit

https://www.canr.msu.edu/hrt/our_gardens/Volunteers

or contact Bethany Troy at troybeth@msu.edu





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 six-legged 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 11 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.

CURIOSITY CAMPS

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 hands-on 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.***

SPLENDID 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.