MEMPHIS BOTANIC GARDEN
Home of the Goldsmith Civic Garden Center

Vine LINE

Spring 2025

Get in the know on tomatoes. Learn about foraging for flowers. Discover the perfect natives for your spring Garden.

Dear Fellow Gardeners,

I don’t know how your spring is going, but mine has been crazy! One day, I woke up and came to work and found six giant Trolls had shown up at the Garden. As you might

imagine, I was a little nervous at first; after all, a troll in real life can be quite intimidating. As I drew nearer, I realized that not only were they friendly, but they had been hard at work beautifying our garden spaces. I won't tell you more here, only that this group of six trolls is truly amazing and has a wonderful message we all need to hear, so I hope you'll come spend some time with them while they are with us this spring!

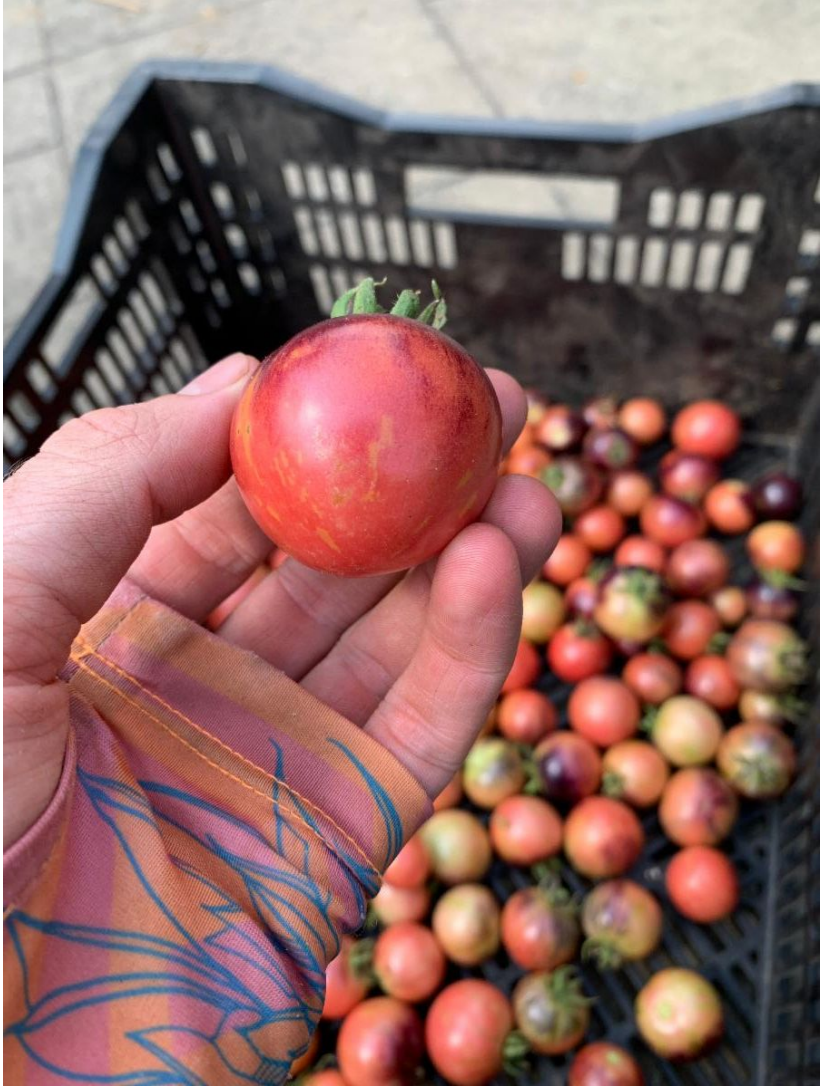
As you may know, this is my third year as Director of Horticulture at the Memphis Botanic Garden. We have done so many projects in the last few years that I've barely been able to sit down and breathe! If you are a gardener, you may have heard the phrase "Sleeps, creeps, and leaps" to describe the first three years of a plant's life. This year, we are certainly seeing the thousands of plants we have planted since I started begin to LEAP! From the Arboretum meadows to the Woodland garden, the new Youth Education and Tropical Plant House, and countless other enhancements, the passion, care, and sweat that our team has poured into these grounds is coming to maturity. It is not just the plants that have grown; the knowledge and depth of our staff has grown as well. I think you'll agree with me when you read the articles below that these are not thoughts from a hobbyist garden blogger, but from seasoned, studied, and above all, very passionate professional horticulturists who hone their knowledge and craft season after season. I am immensely grateful and proud of all my team has been able to accomplish and can't wait to share it with you all.

That being said, please don't take any of this to mean we are slowing down, not at all! Under the direction of our new Executive Director, MaryLynn Mack, we have big dreams and visions for the future of MBG! We will continue to work to create a space where you can connect with nature, create memories, and have moments of rest and respite amid our busy lives.

Plus, don't miss Spring Plant Sale on April 10-12 from 9 am-4 pm! MBG Members only shopping is April 10. General Public can join us on April 11 and 12.

Happy Gardening,

MBG Director of Horticulture



In Search of a Better, Wilder Tomato

By Colin Rye, Urban Home Garden Curator

Let's face it, tomatoes can be hard to grow in Memphis. Between the heat, droughts, pests, and diseases, I consider myself lucky to get a good Cherokee Purple. More success can be found in growing particularly resistant varieties, which are often designated by letters following the name; Mortgage Lifter VFN, for example, is resistant to Verticillium wilt, Fusarium wilt, and (root knot) nematodes. Three caveats here: having resistance to something does not make it immune per se, not all resistance is listed this way (Mortgage Lifter also stands up well to early blight), and just because a variety isn't labeled as resistant to something does not mean it will succumb to it.

Traditional breeding has had great results in improving tomatoes. Today you can find both open-pollinated and F1 (first generation) hybrid varieties that exhibit resistance to almost everything you can throw at them, within reason. My Rutgers tomatoes hung on longer in the season than any other large, traditional varieties last summer. That said, the tomatoes you can buy at the supermarket have been selected primarily for long-distance shipping and looking good as long as possible. Modern commercial tomato varieties have been bred for traits favoring uniformity, fruit size and color, and shelf life above all else, often at the expense of flavor and even nutritional value. Disease resistance, while important, can take a back seat when tomatoes are grown in greenhouses or sprayed with pesticides, fungicides, etc.

I will tell you what tomatoes performed best for me last year, but first let's talk a little about tomato species and relatives. Common tomatoes are currently classified

as *Solanum lycopersicum* (I say “currently” because taxonomic status is subject to change, especially based on DNA evidence). The genus Solanum contains several other common crops, such as potatoes (*Solanum tuberosum*) and eggplants (*Solanum melongena*). Currant tomatoes (*Solanum pimpinellifolium*) are very closely related to the common tomato (in fact, it may be the ancestor of the domesticated species), and therefore they freely hybridize, introducing new genes that can help bring in disease resistance, higher amounts of vitamin C, and more. Some “wild” tomatoes you can grow, such as Everglades, are considered either currant tomatoes, or hybrids between currant and common tomatoes.

As you probably already surmised, the idea of growing wild tomatoes intrigues me. Lucky for me, there are dedicated people out there who are growing (or have grown) the truly wild, hard to come by species, and crossing them with domestic tomatoes. *Solanum habrochaites* (the hairy tomato), *Solanum pennellii* (no common name as far as I can tell), and others have been crossed with the inbred varieties of today, resulting in an explosion of new flavors, colors, and more. These hybrid offspring often have flowers different from domestic tomatoes, too– larger, brighter, and more accessible for pollinators to spread pollen from one to another. By contrast, domestic tomatoes usually self-pollinate due to their small, closed flowers. Joseph Lofthouse works at the cutting edge of this breeding, and along with collaborators, has introduced several varieties and breeding lines (the latter less standardized than the former). If you’re adventurous, you can order seeds of some of these from the aptly named Experimental Farm Network shop online. My best tomatoes last summer descended from this stock. The Memphis Botanic Garden staff favorite, by unofficial incomplete consensus, was a very flavorful, small-medium sized tomato variety marked with a large deep purple blush over a backdrop of red when fully ripe. Besides the fruit color and quality, I was equally impressed with the tenacity of the plants themselves. By the end of July, when most of my other tomatoes had petered out, I was still collecting these. These plants were the variety, or maybe breeding line, called Exserted Orange (named for a feature of its flower structure and what its fruit color was expected to be, respectively). If you look up this variety online, mine look nothing like the images posted. When I reached out to Mr. Lofthouse asking about the anomaly, he told me he thinks that mine must have crossed with another breeding line, which would mean that the tomatoes I grew potentially had the genes of *four* wild species in addition to their domestic tomato ancestry.

The errant purple in my tomatoes more than likely comes from anthocyanins, the same pigment that gives blueberries their color. Dr. Jim Myers with his team at Oregon State University released the variety Indigo Rose in 2011, which was the first tomato with anthocyanins in its fruit (other dark varieties, such as Cherokee Purple, express their color via a different mechanism). *Solanum cheesmaniae* and *Solanum chilense*, neither of which seem to have common names in English, were used to introduce this trait, via traditional breeding, into domestic tomatoes. Today, there are a multitude of anthocyanin-blushed varieties descended from Indigo Rose. Two years ago I grew one called Cosmic Purple Rain, a delightful purple and yellow cherry tomato that sparked much interest and many questions from guests. Last year’s tomatoes picked up this trait via pollen transfer from one of these varieties somewhere along the line. As an aside, these purple tomatoes differ from the recently-introduced Purple Tomato™, a genetically modified variety that gets its color from snapdragons (Baker Creek’s Purple Galaxy tomato variety, before they discontinued selling it, was also seemingly from this patented technological process, despite their initial claims to the contrary).

As for the Spring Plant Sale, I will not be selling my wild purple-blushed tomatoes, but I will be selling one hybridized-with-wild-species variety you’ve maybe never tried. I will have limited numbers of Yellow Centiflor (as in “hundred

flower”), a unique and productive variety produced by crossing the beloved Sungold F1 with wild tomatoes (both *Solanum habrochaites* and *Solanum humboldtii*–which may or may not be a subspecies of either currant or common tomato). Yellow Centiflor was introduced by the late Dr. Alan Kapuler, who introduced several other varieties of interest. Another I’ll have, Matt’s Wild cherry tomato, seems to belong to the common domestic species but behaves like a wild currant tomato, producing through the heat of the summer until frost and re-seeding if you let it. The final variety I’ll mention is Mannon’s Majesty, a disease-resistant beefsteak with *Solanum habrochaites* genes produced by the late Dr. Mannon Gallegly, which I am not offering this year but may try in the future.

All this to say, we are likely to see more and more crosses with wild species in the tomatoes of tomorrow. It isn’t unreasonable to imagine a tomato with genes from five or six wild species, maybe more, if there isn’t one already out there. Backyard breeders today are working with not only the species mentioned above but also others. Why does this matter? Nearly all common tomatoes suffer from inbreeding to some extent. The genetic bottleneck resulting first from domestication and then the global spread of tomatoes means there are only so many genes out there. This limited gene pool, coupled with the fact that almost all tomatoes usually self-pollinate without intervention, compounds into a situation wherein there is not much to work with, genetically, despite the plethora of tomato varieties that exist today. If we want more resilient tomatoes to stand up to heat, wacky weather, insect and pathogen pressure, and whatever else, we can best do that by breeding with wild relatives. You can be part of this process, too. Grow a few plants with wild genes, save seeds from the best ones, and breed your own tomatoes adapted not only to our region but also to your specific garden (for example, if you don’t water your tomatoes often or ever, you’ll select for drought-tolerant plants, generally improving year by year). I also want to hear from you if this is something you are interested in. Would you like to buy more wild-crossed tomatoes at our Spring Plant Sale? Which interests you the most: the purple-blushed ones, the prolific cherry tomatoes, the better beefsteak? You can find me and my tomatoes at the MBG Spring Plant Sale on April 10-12, 2025.

Eat the Flowers!

By Anna Vo, Woodland Garden Horticulturist

Spring is in full bloom, and with it comes a delightful array of edible flowers just waiting to be enjoyed! As a food enthusiast, I love exploring what's growing around me, and spring is the perfect time to forage for fresh, nutrient-packed flowers. Many of the blossoms you see in nature aren't just beautiful—they're also delicious! Whether you're hiking, walking, or just enjoying the outdoors, you might just find yourself an edible snack. However, always make sure you positively identify any plant before eating it, as many plants have look-alikes that can be harmful. Be cautious about potential allergies and where you're foraging—avoid areas with high pollution, like golf courses or areas with pesticide and herbicide use. Foraging is a fun way to connect with nature and, hey, it might even save you a few dollars on groceries!

As a tree enthusiast, let's start the list with trees! Many trees produce edible flowers. Some examples include Redbud, Black Locust, and Southern Magnolia—each easy to identify.

- **Redbud (*Cercis canadensis*)**: This tree thrives along woodland edges, where its vibrant pinkish-purple flowers stand out in early spring. Redbuds belong to the pea family, so their young seed pods are edible. The flowers themselves are high in vitamin C and have a mild, sweet flavor, much like snow peas. They can be eaten raw or cooked.

- **Black Locust (*Robinia pseudoacacia*)**: Known for its fragrant flowers, the Black

Locust offers edible blooms, but the rest of the plant is toxic. The flowers can be eaten raw, cooked, or used to infuse wines and syrups. Their flavor is similar to snow peas.

- **Southern Magnolia (*Magnolia grandiflora*)**: A beloved Southern tree, its petals are edible. Though often pickled and used in salads for flavoring, they can also be eaten raw. The taste is strong, so use sparingly if you try them.

Spring ephemerals are the first to bloom, taking advantage of the sunlight before the tree canopy fills in. Many of these are edible, including Cutleaf Toothwort, Virginia Bluebells, Trout Lily, and Spring Beauties.

- **Cutleaf Toothwort (*Cardamine concatenata*)**: A member of the mustard family, this plant has a deliciously peppery kick. The plant comes back every year from their tubers. These tubers are also edible but of course anytime you eat the tubers you are killing the plant so I just stick to eating the foliage to help the plant proliferate. They can be eaten raw or cooled in salads, soups, or stir-fries.

- **Trout Lily (*Erythronium americanum*)**: Both edible and medicinal, Trout Lily helps reduce fevers, swelling, and even treat gout. Its leaves, flowers, and corms are edible, though they are emetic (can cause vomiting in large quantities). The corm has a cucumber-like flavor when roasted.

- **Virginia Bluebells (*Mertensia virginica*):** These early spring bloomers have leaves and flowers that can be eaten raw or cooked. Their flavor is similar to borage, and you can use them like spinach in salads and other dishes.

- **Spring Beauty (*Claytonia virginica*)**: A low-growing perennial, Spring Beauty features delicate flowers with white petals and pink stripes. Both the flowers and underground tubers are edible. The tubers taste like mild chestnuts and can be eaten raw or cooked.

Other common edible plants include Wild Violet, Evening Primrose, Golden Alexander, and Common Milkweed.

- **Wild Viole**t: Not only are violets lovely, but they're also entirely edible! The flowers are mildly sweet, and the stems are bland. You can use them in salads, as garnishes for desserts or cocktails, or even make violet jelly.

- **Evening Primrose (*Oenothera biennis*):** Every part of this plant is edible. The young leaves are best in the spring, whether raw or cooked. The yellow flowers are sweet and can be used to add a pop of color to salads, while the roots have a sweet, peppery flavor and a potato-like texture.

- **Golden Alexander (*Zizia aurea*)**: This native perennial has edible leaves and flowers, both of which taste mildly like a combination of celery and asparagus. The roots are used medicinally, while the plant's yellow-green flowers attract a variety of pollinators.

- **Elderberry (*Sambucus canadensis*)**: Elderberries are incredibly useful. The flowers can be dipped in batter and fried, while the petals can be eaten raw. The berries should always be cooked before consumption. Elderberries are often used to make wine, jam, jellies, and pies.

- **Common Milkweed (*Asclepias syriaca*)**: A favorite among native plants, milkweed's entire flower cluster is edible. The young leaves hold their texture when cooked, and the immature seed pods taste similar to green beans. Be cautious of the sap, which can irritate skin, eyes, and mouth. Always wash your hands after handling the plant, and if it tastes bitter, it's not milkweed—check to make sure

you're not confusing it with Dogbane (*Apocynum cannabinum*), which is toxic. Milkweed is also an important host plant for Monarch caterpillars, so keep an eye out for them while foraging!

This list only scratches the surface of the many edible plants that spring has to offer. Whether you're an experienced forager or just starting to explore, there's so much to discover in the world around you. Happy foraging, and remember to always forage responsibly!

Great Plants for Great Gardens

By Anne Ballentine, Native Plant Curator

Pycanthemum tenuifolium, commonly known as narrow-leaved or slender mountain mint, will happily tolerate a wide range of growing conditions, from drought to periodic flooding, from full sun to mostly shade. It is also fantastic for use on hillsides to help prevent erosion. A related plant, *Pycanthemem muticum*, clustered mountain mint, thrives in the same conditions. The primary difference between the two species is that *P. muticum*, while not as aggressive as a true mint, is likely to spread more than *P. tenuifolium*. Both species are native to the eastern United States, have small white flowers from mid to late summer, and at 2 to 3 feet tall, are delightful in any herb garden or perennial boarder.

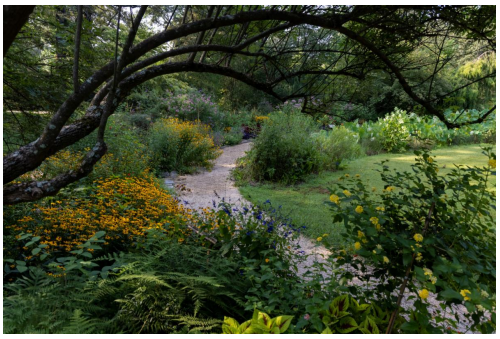
Monarda fistulosa, most often called wild bergamot, is an herbaceous perennial that sports pinkish to lavender blooms all summer long. A sun and drought lover, like all bergamots, this variety is very attractive to butterflies and hummingbirds. Another member of the mint family, *Monarda*, can also be used in teas, as a digestive aid, and in other culinary applications. *M. fistulosa* is native to all of North America and will reach 3 to 4 feet tall, making it ideal for the back of a garden bed.

Amsonia taberneamontana is a lovely late spring bloomer, commonly known as eastern blue star. It is native to the eastern and southern United States and is found everywhere from wet woodlands to open fields. Its delightful light blue, star shaped flowers

attract butterflies and other pollinators, as well as making a beautiful cut flower. At 2 to 3 feet tall, this plant works well in the center of a garden bed, as well as being highly adaptable to slopes and hills.

Gallardia x. grandiflora is a garden standout. Blanketflower comes in a wide range of yellow, orange, and red shades, with flowers closely resembling those of a daisy. The plant is a vigorous bloomer, flowering from late spring until the first frost. While developed for the nursery trade, it was created by crossing two native varieties of *Gallardia*. Butterflies love the flowers, and goldfinches are attracted to the fall and winter seed heads. Most varieties are between 2 and 3 feet tall, but shorter and taller varieties exist.

All of these plants (and many more!) will be at our annual Spring Plant Sale!



Something you want to learn more about?
Email our Director of Horticulture at
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Volunteer at Spring Plant Sale

View the Plant List

To read past issues of The Vine Line visit the archive by**clicking here**.
