

Summer 2023, Issue 27

In this Issue

| Title | Page |
|--------------------|------|
| Upcoming Programs | 1-4 |
| Soil Solutions | 5 |
| Companion Planting | 6 |
| Mints | 7-8 |
| No Digging! | 9 |
| Pollinators | 10 |
| AAS | 11 |

We hope you enjoy this summer edition of the *St. Johns Lawn and Garden Gazette*, which is designed to bring you seasonal gardening information and inspiration.

Check out the next few pages for details on our summer line-up of gardening programs:

Gardening with Herbs in Northeast Florida Friday, July 14, 2023

Gardening with Muscadine Grapes Friday, August, 11, 2023

Salt Tolerant Landscapes

Wednesday, August 16, 2023

Veggie Garden

Summer is the time to plant heatloving crops including sweet potatoes, okra, and lima beans. For a complete list, download the North FL Gardening Calendar: http://edis.ifas.ufl.edu/pdffiles/EP/ EP45100.pdf

or The Florida Vegetable Gardening Guide: http://edis.ifas.ufl.edu/vh021



An Equal Opportunity Institution.



Upcoming Programs



Gardening with Herbs in Northeast Florida

Date: Friday, July 14, 2023

Time: 10 am to 11:30 am

Location: St. Johns County Extension Auditorium

Learn the basics of gardening with herbs in northeast Florida. We will discuss recommended gardening practices and many of the most popular and easy to grow herbs for our area. Format will be indoor lecture/discussion followed by a visit to our demonstration herb gardens (right outside the door).

Preregistration on Eventbrite: \$11.26 (includes Eventbrite fees)

Eventbrite registration link:

https://www.eventbrite.ca/e/gardening-with-herbs-in-northeast-florida-tickets-636719584417

Upcoming Programs

Gardening with Muscadine Grapes

Date: Friday, Aug 11, 2023

Time: 9:30 am to noon

Location: Hastings Agricultural Extension Center

595 East Saint Johns Avenue Hastings, FL 32145

Muscadine grapes are a sustainable crop in northeast Florida that can be successfully grown in the home landscape. Join us at Hastings Agricultural Extension Center to learn about recommended gardening practices for cultivating muscadine grapes. Topics will include cultural practices, integrated pest management, recommended varieties, and propagation. Participants will have an opportunity to propagate their own muscadine grape plant.

This workshop is a join effort among horticulture agents from Flagler, Putnam, and St. Johns Counties, and is the first in a series of workshops on berry gardening. Future classes to look out for will include gardening with strawberries and blueberries.

Eventbrite registration link:

https://www.eventbrite.com/e/gardening-with-muscadine-grapes-tickets-671675779337

Upcoming Programs

Salt Tolerant Landscapes

Date: Wednesday, Aug 16, 2023

Time: 10 am to 11 am

Location: St. Johns County Extension Auditorium

Learn about coastal plant communities as inspiration for your salt tolerant landscape.

We will discuss the importance of selecting salt tolerant plants for landscapes that get salt spray, periodic saltwater flooding, or are irrigated with reclaimed water, as well as appropriate plant palette for successful coastal gardening.

Preregistration on Eventbrite: \$11.26 (includes Eventbrite fees)

Eventbrite registration link:

https://www.eventbrite.ca/e/salt-tolerant-landscaping-tickets-636730236277



Soil Solutions for your Summer Vegetable Garden

Terra Freeman, Urban and Commercial Horticulture Agent, UF/IFAS Extension St. Johns County



Sunn hemp and cowpea cover crop

If you find vegetable gardening in Florida's summer heat less than appealing, here are some options for setting your vegetable garden up for success with minimal summertime effort. Solarizing your soils or planting a cover crop can improve soil health while keeping weeds at bay. Soil solarization heats the soil enough to kill weeds, diseases, and other pests, including knot nematodes. Solarization involves covering the soil with clear plastic, which will allow sunlight to penetrate and heat the soil. Before installing the plastic, the garden should be cleared of weeds and other debris. Solarization is best done on moist soils, so installing a day after rainfall is ideal. Be sure to bury the edges of the plastic to keep it in place as well to allow heat to build. The plastic will need to be left in place for 6 to 8 weeks to be most effective. Solarization can reduce weed and pest pressure in your garden for several months after removing the plastic, setting your fall garden up for success!

Another method to improve the overall health of your garden is to plant a cover crop. Cover crops

involve planting a crop that will imbue other benefits to your garden, such as increasing organic matter, improving soil structure, adding nutrients, controlling weeds, enhancing populations of soil microbes, preventing erosion and attracting beneficial birds and insects. It is important to select the proper cover crop for the benefits you are seeking. Cowpeas and sunn hemp are recommended warm season cover crops for northeast Florida that can be planted independently or together for a mixed crop. Sunn hemp supplies its own nitrogen and produces significant quantities of biomass quickly. Cowpeas are resistant to root-knot nematodes and have a short growing season (40-50 days).

For those who want to continue growing vegetables throughout the summer, there are a handful of crops that thrive in our summer environment. Sweet potatoes, okra, lima beans and eggplant will happily grow, providing a bountiful summertime harvest.

References:

Solarization for Pest Management in Florida: https://edis.ifas.ufl.edu/publication/IN824



Sunn hemp and cowpea cover crop

Companion Planting

Madeline Neyens Horticulture Program Assistant, UF/IFAS Extension St. Johns County

Companion planting is an ancient philosophy that allows plants to thrive through minimal intervention. The underlying principle is that you can cultivate your garden so that natural biodiversity facilitates nutrient uptake and pest control.

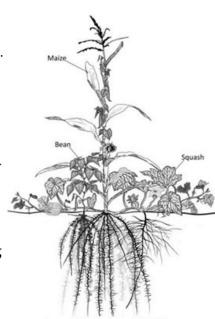
Pest control is a relevant topic to any gardener, but having organic approaches in your toolbelt can make all the difference. You can work with the environment by using plants to suppress weeds and repel pests instead of using products that may harm beneficial insects. Creeping plants with broad leaves like

squash can keep weeds down by blocking sunlight. Placing strong herbs next to edibles may repel pests, though they may alter the taste of your vegetables. Marigolds, chrysanthemums, and nasturtiums can also serve as a defense by releasing chemicals that harm or deter pests. Marigolds produce a substance that is known to prevent nematode reproduction, though they may be more effective if planted 1-2 months before the vulnerable crop. In addition to repelling pests, you can use certain plants as decoys to draw pests away from your vegetables; this is known as trap cropping. Whatever the main pest is for your current crop, find out what they prefer more and incorporate those throughout the area.

Nitrogen fixation is a crucial process which takes place beneath the soil's surface. While nitrogen

makes up most of our atmosphere, the gas $\binom{N_2}{1}$ is unusable to plants. Nitrogen-fixing bacteria form a symbiotic relationship with legumes, allowing them to convert the $\binom{N_2}{3}$ into ammonium $\binom{NH_4^+}{4}$ and nitrates $\binom{NO_3^-}{3}$. Planting legumes like peas, beans,

and peanuts is an excellent choice for putting



Lopez-Ridaura, S. et al. (2021)

nitrogen back into your soil. Like the marigolds, planting 1-2 months before your main crop may maximize the benefits by allowing time for the nitrogen to become available. However, some ancient cultures found that planting legumes along with their main crops worked for them.

The most prominent example of companion planting is the "three sisters" model. Mesoamericans discovered that climbing beans, squash, and corn tend to grow better when planted together. Each plant plays its own role, resulting in better

growing conditions for them all. This method can be used with Florida-friendly plant varieties that fit the characteristics of the three components below.

<u>Trellis:</u> The corn provides a sturdy stalk for the beans to climb and get ample sun.

<u>Fertilizer:</u> The beans facilitate nitrogen fixation in the soil by acting as a host for the bacteria.

There are dozens of varieties of climbing beans that are great for Florida gardens.

Weed Management: The broad squash leaves suppress competition from weeds by shielding the soil from the sun. Calabaza or melons can also fill this role. Avoid climbing gourds as the corn stalks will not be able to support their weight.

As with all gardening, companion planting requires experimentation to see what works and what does not. You know your garden best, so take the time to observe the interactions occurring between organisms. You may discover something that works for your unique environment.

Mint...magical, marauder, or a little of both?

Pat Ludwig, Jane Palmer, Linda Mundy, and Pam Hutcherson Master Gardener Volunteers UF/IFAS Extension SJC



American Wild Mint

Mention mints (*Mentha*) to a gardener and you may see a smile or a grimace. There are so many different types of mints with flavors ranging from spearmint and peppermint to chocolate and apple and orange. And you can't deny the flavor and scent that Cuban mint adds to your mojito!

Mint leaves and their flowering tops are used for culinary and medicinal purposes, but the plant can also serve as a groundcover in your landscape. Mint leaves and flowers can be used fresh or dried. In Florida, many of these mints grow profusely in shade or full sun. What makes mint magical or a marauder? The answer depends on the type of mint you choose, where you grow it, and how you plan to use it. Here are a few types of mint to consider:

Peppermint (*Mentha X piperita*): This mint has green rounded leaves and pink flowers. It is a fast spreader, and can grow 12-24 inches tall, preferring moist but well drained soil. Often used to flavor tea, it also is used for potpourri.

Chocolate mint (Mentha × piperita f. citrata 'Chocolate'): The chocolate in this mint's name comes from its smell, not its taste. Its taste is orangey. Often used to flavor drinks and desserts, its foliage is darker green than other mints and its flowers are lavender. This mint grows up to 24 inches and enjoys full sun to partial shade.



Chocolate Mint

Mint...magical, marauder, or a little of both?

Pat Ludwig, Jane Palmer, Linda Mundy, and Pam Hutcherson Master Gardener Volunteers UF/IFAS Extension SJC

Pennyroyal (Mentha

pulegium): This mint is most often used as a pest deterrent rather than a culinary herb. It is toxic and should not be consumed. It grows to about 6 inches tall, bears lavender flowers, and is slower growing than other mints. Often seen as a groundcover in land-scapes.



Corsican Mint

Corsican mint (Mentha

al, this mint is an excellent short plant for the edges of a container or dense groundcover between steppingstones. Its leaves and tiny lilac flowers release a fragrance when stepped on and reach less than one inch in height.

Pineapple mint (Mentha

suaveo-

lens 'Variegata'):
This mint is a cultivar of apple mint. It is different than most mints as its value is in its soft, furry, and crinkled variegated leaves, which leads to its use as an ornamental plant. It also has



Pineapple Mint

many culinary uses in fruity salads, jellies, and teas, as well as a pretty garnish. It prefers full sun in our gardens and can grow up to 36 inches tall, and unlimited in width.

American wild mint (Mentha canadensis): This mint is native throughout much of North America, although it is not native to Florida. It is often used in candies, jellies and teas, as well as essential oil and menthol production.

It is a fast-growing perennial, with hairy stems and bluish, pink or white flowers, reaching a height of about 18 inches.

We hope you enjoyed this glimpse into mint plants- herbs that can be used in the kitchen or as a groundcover; magical in their breadth

> of use. These tough, hardy perennial marauders are best planted in containers or in the ground where their ability to spread is a benefit to your landscape.

References: Herbs in the Florida Garden: https:// gardeningsolutions.ifas.ufl.edu/ plants/edibles/vegetables/ herbs.html

No Digging!

Patty Plourde Master Gardener Volunteers UF/IFAS Extension SJC

The "no dig" approach to gardening is the process of planting without tilling or excessive digging. This gardening method is also referred to as no tilling gardening, sheet gardening, and even lasagna gardening. While it might seem ill advised to grow a garden without digging into the soil, consider how forests



and meadows grow with no help from people. Leaves, grasses, and other plants fall to the ground, where they collect, creating a covering of organic matter. This organic matter then feeds the topsoil and the ecosystem living in the soil. Together they create an environment in which their individual success depends on the ecosystem's resilience (Murphy).

How to Build a "No Dig" Garden Bed:

- 1. Select a suitable area for a vegetable or flower bed.
- 2. Cover the ground with 4 to 6 layers of newspaper or 1 to 2 layers of cardboard. Do not use cardboard that has a waxy coating.
- 3. Wet the newspaper or cardboard thoroughly.
- Spread compost such as worm castings, rotted manure, and leaf mulch over the newspaper or cardboard. Be sure there is a thickness of at least 3 inches of compost.
- 5. Cover this with a layer of carbon material such as leaves, sawdust, or straw.
- 6. Top with another layer of grass clippings, green weeds (no seeds), kitchen scraps, manure, or a combination of any of these. The idea is to block out all light from reaching the weeds and grass underneath. Plus, the organic matter will keep the cardboard moist, which will help to suppress the weeds.
- 7. Create a planting hole in the compost just big enough for the plant roots. Pull the soil back with a small trowel and tuck the plant in by gently

pushing the compost back in place around the roots. As the plant grows keep off the planting beds as much as possible.

8. The plant roots will find their way to the soil.

Maintaining a "No Dig" Garden

• Apply compost to the topsoil once or twice a year. A layer of 1 to 2 inches of

compost in spring and fall is likely to be sufficient.

• Remember, do not till into the compost. Just let nature do its thing.

Benefits of "No Dig" Gardening:

- No dig gardening helps to limit weeds that flourish in soil. Weed seeds can lie dormant in soil for years. Tilling and digging give them an opportunity to be unearthed and grow. It is staggering to think that there are as many as 130 million weed seeds per acre of land (Murphy).
- This method will not produce very much heat, so any weed seeds in the composting layers (above the cardboard) will likely sprout in garden beds.
- This approach can be appropriate for everyone, including those with limited physical abilities.
- It is an effective way to convert grassy areas to gardens.
- It builds a healthy soil ecosystem that naturally supports pollinators, insects, birds, and other animals.
- It increases the soil's water-holding ability.
- It promotes a healthier, more biodiverse garden which, in turn, produces more nutritious food and healthier flower beds.

No dig gardening is all about taking care of the soil. No dig gardening builds the soil up, rather than destroying it by breaking it down with a tiller or shovel.

Support Our Pollinators: Feed their Children

Dianne Battle, Master Gardener Volunteer UF/IFAS Extension SJC

In 2006 the US Senate unanimously approved the designation of a week in June as "National Pollinator Week." The action was significant not only because pollinators help produce "one out of three bites of our food," but because pollinators themselves are part of the earth's food web, and it is in decline. Pollinators include bees, butterflies,

moths, flies, beetles, wasps, and small mammals. Charles Darwin observed that for every blooming plant there is at least one pollinator adapted to pollinate it; in some cases, the relationship between a single plant and a unique species of pollinator is so tightly bound that the disappearance of one marks the

extinction of another. National Pollinator Week is an opportunity to help stabilize our planet's food web by supporting pollinators.

If you are a gardener, you can help pollinators such as bees, butterflies, moths, and humming-birds. You can obtain non-native nectar plants from a big box store, but our pollinators need more than just nectar to ensure their lifecycle is secure. By planting native plants for bees, butterflies and moths in your landscape, or even in some container gardens, you can provide additional support that will secure pollinator lifecycles.

Butterfly, moths, and bee larvae have differing nutritional needs from their adult forms. For instance, bees provide their young with high protein/high energy foods consisting of pollen, nectar, and their own saliva. Not all plants, especially cultivated ones, provide a rich source of pollen and nectar that supports the larvae. You probably already know that butterfly caterpillars require specific host plants to nourish them through the larval stage. The same is true for

moths. Although some butterflies, such as swallow-tail species, can use non-native plants for caterpillar development, the large majority of lepidoptera (butterflies and moths) need specific native plants on which to lay eggs. The UF/IFAS publication, https://edis.ifas.ufl.edu/publication/UW057, Butterfly Gardening in Florida, has summary tables of plants that provide suste-

nance for various butterfly species.

pollinators.

You can find native plants at UF sponsored plant sales, at local native plant growers and by searching www.plantrealflorida.org. Joining a local native plant group can provide opportunities for learning about and swapping native plants. Lastly, you need some sources of information to provide you with suggestions for plants that can best support pollinators. The Pollinator Partnership, has a free downloadable guide for our growing area, https://pollinator.org/PDFs/
OuterCoastal.rx5.pdf, that will help you select and install suitable perennial plants. The Florida Wildflower Foundation has guides for attracting specific pollinators with native Florida annual wildflowers https://www.flawildflowers.org/



AAS Hot and Spicy Pepper Patch

Shirley Barber, Master Gardener Volunteer, UF/IFAS Extension SJC

Last year's hot/spicy pepper patch featuring All-America Selection (AAS) winners did so well, there will be a repeat performance at the Botanical Gardens at St. Johns County Extension Center in an expanded area with 46 pepper plants. Pepper plants are beautiful with healthy dense dark green foliage showing no signs of disease. They perform best in the heat of the summer and continue to set fruit throughout the hottest months. The colorful peppers in many shapes and sizes remind you of holiday ornaments in shades of yellow, gold, orange, green and red hanging from sturdy branches. 'Mad Hatter' was a favorite pepper last year with its unusual shaped fruits on 5 foot tall vigorous plants.

There are a few additional pepper varieties this year representing AAS winners from recent years and a few older favorites.

- · Buffy (2022) –green to red peppers, good flavor, 500,000 Scoville units.
- · Cajun Belle (2010) –green to deep red, hint of heat and great Cajun flavor.
- · Chilly Chili (2002) –ornamental, but edible as a colorful garnish. Yellow to red.
- · Pot-A-Peno (2021) Jalapeno, compact plant, trailing habit great for pots.
- · Quickfire (2022) Thai-type pepper, compact beautiful plant, 40,000 Scoville units
- · San Joaquin (2023) Jalapeno, green to red, pickling, 2,500-6,000 Scoville units.
- · Wildcat (2023) Cayenne, large 8" long peppers, mild, smoky flavor 500-1,500 Scoville units

The Scoville Scale is a measurement of the heat and pungency of chili peppers where each pepper is recorded in Scoville Heat Units. In comparison, the local favorite Datil pepper has a Scoville rating like the Habanero pepper at 100,000 to 300,000 units.

Check out the AAS flower and vegetable displays at the Botanical Gardens at St. Johns County Extension Center where you will see the hot/spicy pepper patch at the end of the main border adjacent to the sidewalk through the Crepe Myrtle Allee' and across from the butterfly garden.







An Equal Opportunity Institution.