

Summer 2021, Issue 18

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**Veggie Garden**

Lima beans, pole beans, collards, pumpkin and more thrive this time of year. 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>



**SAVE THE DATE**  
**OCTOBER 2 & 3, 2021**

UF/IFAS Extension St. Johns County  
3125 Agricultural Center Dr. • St. Augustine, FL 32086

Save the date for our annual Master Gardener Volunteer plant sale, rain barrel and compost tumbler sales and education, plant clinic, datil pepper gardening education, datil pepper restaurant cook-off, hot sauce competition, vendors and more at the 2021 Datil Pepper Fall festival!



For more information contact: **UF/IFAS Extension St. Johns County**  
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# Vermiculture

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

Healthy gardens begin with healthy soils. One of the most effective ways to improve soil quality is by adding compost. You may be familiar with traditional compost bins, but have you tried composting with worms?

Vermiculture is the process of using worms to produce rich compost from kitchen waste. The nutrient-rich worm castings (worm manure) produced can be used similarly to regular compost in gardens or potted plants. The worm bin can be stored in the garage or under the kitchen sink, making it a suitable option for those with a small yard or who generate mostly food scraps

**Worm Selection:** It is important to select the appropriate type of worm for your worm bin. Red wigglers, *Eisenia fetida*, are the most common type, but African night crawlers can also be used. Check your local bait shop or purchase worms online.

**Worm Bin Construction:** To construct a worm bin, you will need 2 shallow bins (ideally 8 to 12 inches deep), one placed inside the other. Plastic storage tubs are a great option. The top bin will need holes drilled in the lid (to supply oxygen) and bottom (for drainage). The bottom bin will capture liquid from the top bin. It helps to place an upside-down pot in between the bins to elevate the top bin slightly, which will assist with drainage.

The top bin will house all the materials, including bedding, food scraps, worms and castings. First, line the inside of the top bin with bedding such as shredded paper, cardboard or dried leaves. Next add a scoop of starter compost, kitchen scraps, and worms. Worms prefer vegetables, fruits, coffee grounds, pasta, bread, cereal, tea bags and paper products. Do not feed them meat, dairy, oils, or eggs as this can led to odors and

may harbor pathogens. Worms can be fed daily, weekly, or as desired. The more they are fed, the more compost will be created. Two pounds of worms can eat one pound of kitchen scrapes daily! Cover the kitchen scraps with bedding each time they are fed to seal in odors and be sure to close the lid tightly to keep out pests and prevent worms from escaping.

**Moisture:** Because worms breathe through their skin, it is important to keep the bedding moist, but not wet. To soak up excess moisture, add more bedding; to add moisture, it helps to keep a spray bottle filled with water nearby.

**Location:** Store your worm bin in a dry, dark location protected from the elements, such as a garage. Be sure to keep the lid on since worms do not appreciate light and it will keep pests out. The most productive temperature for red wigglers is between 60°F to 80°F.

**Harvest and Use:** To harvest the worm castings, dump the finished compost onto a tarp. The worms will retreat from the light and towards the inner pile. Use your hands to separate most of the worms from the compost. Save some starter castings and worms to start a fresh bin.

The worm castings can be used in a garden or potted plants to add nutrients and improve water-holding capacity and texture of the soil.

**For more information, visit:**  
Recycling Organic Materials to  
Improve Your Florida-Friendly  
Edible Landscape: <https://edis.ifas.ufl.edu/publication/EP599>



Single worm bin assembly. Step 2: Fill bin with greens for food source, bedding, starter compost, and worms; moisten with water.

Credit: Terra Freeman, UF/IFAS

# Zoysia Grass in the Landscape

Gail Wheeler,  
Master Gardener Volunteer  
UF/IFAS Extension SJC

## Zoysia Maintenance



Hardy Zoysia grass is used not only commercially in golf courses and athletic fields but is becoming popular in the home landscape. There are several species and cultivars of Zoysia grass with specific traits to each. In Florida two of the most widely used cultivars of Zoysia are “El Toro” and “Empire Zoysia®.”

El Toro is an improved *Zoysia japonica* from California with a faster establishment rate and better cold tolerance. It has been noted there is less thatch buildup and earlier spring green-up. El Toro performed well in the NTEP trials (National Turf Evaluation Program) conducted both in Gainesville and Pensacola.

Empire Zoysia® is a registered brand of a zoysia cultivar which is fast becoming popular in Florida. The growth habit is dense with a bright green color and is more tolerant of sandy and clay containing soils. Empire, however, does not do as well in shady areas as some of the other Zoysia varieties.

**Fertilization:** Zoysia grass responds better to a fertilization regime of smaller, more frequent feedings. In North Florida it is recommended to fertilize 2-3 times per year.

**Mowing:** Mowing height should be 2 to 2.5 inches for medium to coarse textured Zoysia using a rotary mower. Fine bladed Zoysias can be maintained at a 1-inch height.

**Irrigation:** In drought conditions Zoysia will turn brown and go dormant for a short period of time but will green up once irrigation or rain resumes.

**Thatch build-up:** Zoysia grasses typically develop a thick thatch layer after several years and particularly when overfertilized with nitrogen. To keep a uniform appearance thatch should be removed using a vertical mower.

**Pests:** Hunting billbugs are the most serious insect to affect Zoysia grass. Irregular brown patches are a sign of billbug damage and can be easily mistaken for dormancy. If 10-12 billbugs are seen per square inch, then pesticide application is recommended. Mole crickets and white grubs can also be a problem for Zoysia.

**Diseases:** Large patch is the most problematic disease for Zoysia grass when soil temperatures are between 65-75 degrees. Other diseases that can affect Zoysia are dollar spot and rust. Dollar spot can occur when nitrogen levels are not optimal and rust can occur during hot, humid weather.

**Reference:** Zoysiagrass for Florida Lawns: <https://edis.ifas.ufl.edu/publication/lh011>

# 9 Practical Perennial Herbs for Your Garden

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



It's summer and with the temperatures topping 90 degrees, do you wonder if there are any herbs you can plant and enjoy for a few years? Do you find yourself looking for herbs that are pretty and practical for your year-round garden? Why not

consider perennial herbs? Perennial herbs can be planted outdoors in the ground or in pots for several years of harvesting. Some perennials may wither and go dormant in the colder months, but they grow back and flourish again in the spring.

In Northeast Florida, we enjoy a longer growing season and are lucky that at least nine herbs are considered perennial in our climate. These perennials include chives, sage, thyme, oregano, Mexican and French tarragon, sorrel, rosemary, mint, and African blue basil. We've chosen to highlight chives, Mexican tarragon, oregano, sage, and thyme.

## **Chives (*Allium schoenoprasum* and *Allium tuberosum*)**

Chives long, slender leaves and globe-like flowers appear from late spring to early summer and adapt to almost any soil in Florida. Part of the onion family, chives produce very attractive violet-pink colored flowers. Both the leaves and flowers are edible and can be harvested at any time during the season and used fresh. Chives are delicate, so use scissors to snip off pieces so

you do not accidentally yank the whole plant out of the ground. This herb's relative, garlic chives, have flatter leaves and white flowers that bloom in late summer with a mild garlic flavor. While chopped chive leaves can be used with many foods, they are excellent in salads, omelets, stews, and soups.

## **Mexican tarragon (*Tagetes Lucinda*)**

Mexican tarragon, also called mint marigold or Mexican marigold, is a semi-woody herb that forms a small upright bush of 2-3 feet tall. Both Mexican and French tarragon belong to the Asteraceae plant family. With flavor like traditional French tarragon, this perennial herb has a better tolerance for drought, heat and humidity than its relative, French tarragon. Cultivated for culinary and medicinal purposes, tarragon has an aromatic scent reminiscent of anise, coupled with notes of mint and cinnamon. Its bright yellow flowers can be used in salads, while its leaves are most often used in preparation of chicken, fish, salads, salad dressings, sauces, shellfish, soups, and vegetables.



# 9 Practical Perennial Herbs for Your Garden

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## Oregano (*Origanum vulgare*)

This hardy herb is almost impossible to kill! It does not mind poor soils and spreads quickly. Oregano, a member of the mint family, has tiny pale purple flowers that last for weeks in the summer and attract pollinators. The plant can grow from 8 to 33 inches and can do well in wet and dry seasons, though it prefers full sun and well-drained soil. Commonly called “the pizza herb”, it is often the “go to” staple herb of Italian cuisine. For best flavor, harvest the leaves just as the flower buds form. Widely used with roasted, fried, or grilled vegetables, meat, fish, or pasta dishes.

## Sage (*Salvia officinalis*)

Sage has soft, fuzzy pale green, purple or variegated leaves and beautiful tubular-shaped flowers that hummingbirds adore. It requires well-drained soils and good air-circulation and is known as a short-lived perennial in our area. It is extremely cold hardy, so you can still snip off pieces even in the winter. Italians use sage as a complement to pasta and potato dishes and in

their famed Saltimbocca. Sage has long been used to flavor sausages, pork, pates, soups, and Thanksgiving stuffing.

## Thyme (*Thymus vulgaris*)

Thyme, a genus of about 350 species, basically thrives on neglect and could care less about heat, drought, and incredibly poor soils. It's also a fast grower when started from small plants or cuttings. It's teeny-tiny, rounded leaves and loads of white, pink, or purple flowers are loved by many pollinators. A lovely ground cover, it can hold slopes in place or can be used as an alternative to grass between stepping stones. Thyme is versatile herb used in salt substitute recipes and in recipes for eggs, lamb, veal, rice, poultry, barbeque sauce, fish, oysters, chowders and soups. Thyme also adds great flavor to mushrooms and tomatoes.

Looking for more information on these highlighted plants or more on edible herbs and gardening? Please refer to UF/IFAS publications. Happy gardening!



# Rose Rosette Disease

Amy Leach,  
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Witches Broom; Photo credit: Binoy Babu

The rose is one of the most beloved and popular flowers worldwide.

Today roses are experiencing a deadly threat from Rose

Rosette Disease

(RRD), which has been recently confirmed in Florida counties of Alachua, Levy and Gadsden. RRD is caused by the Rose Rosette Virus (RRV) which is spread by an Eriophyid mite *Phyllocoptes fructiphilus kefier*. This mite feeds specifically on roses, is a vector for RRV (thus causing RRD), and is so small that it is only viewed with a microscope. Identification of RRD is often difficult due to symptoms being highly variable depending upon the rose species or cultivar. Knockout roses are especially vulnerable to RRD.

## Symptoms of RRD include:

- Rapid elongation of stems
- Thorn proliferation/increase in “prickle” density
- Witches Brooms – multiple stems at end of stems with small, twisted leaves
- Unusual leaf shape and reddening of leaves
- Deformed flowers
- Yellowing and stunting of entire rose plant with dying branches

Control of RRD is especially challenging since there is currently no cure and confirmation of the disease is not easy. RRD is often confused with other problems such as herbicide damage. So far, there is no known rose cultivar that is resistant to RRD, however, you can reduce your risk and the spread of RRD with good cul-

tural practices and managing mites. Some tips include:

- Closely monitor (scout) all roses throughout the year for signs of RRD
- Carefully inspect all new plants and, as they grow, watch for signs of RRD
- Immediately remove roses with signs of RRD including any fallen debris and roots (all can harbor eriophyid mites) then bag up everything and dispose of off-site

In order to reduce the transfer of mites from rose to rose, when planting new roses, space them so canes, leaves and roots do not touch neighboring roses

A multi-tactic approach including cultural and chemical control is the most effective way to control RRD. Eriophyid mites hide under rose sepals, making control by direct contact of chemicals extremely difficult. Some chemical control methods include:

- Using miticides, but note that not all miticides control eriophyids.
- Pruning removes mites near buds; application of horticultural oil on pruned plants will decrease mite population.
- It is critical to remove and destroy any canes, roots and fallen leaves BEFORE planting new roses.



Excessive thorn proliferation;  
Photo credit Binoy Babu

Reference: [PP317/PP317: Rose Rosette Disease: A New Disease of Roses in Florida \(ufl.edu\)](#)



## Take a Leap...Try Something New in Your Garden!

Shirley Barber,  
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Looking for something new to put in your garden? Garden catalogs and magazines will tempt you with captivating photos and descriptions. Plant breeders do not disappoint as they introduce new and interesting varieties, with each ever so fascinating than the last.

All-America Selections (AAS) continues to trial and evaluate new plant introductions throughout North America. Every year they introduce the best of the crop as AAS Winners proclaiming they have been “Tested Nationally and Proven Locally®”.

An article written for *Horticulture* magazine declared: “The Award-winning Amarillo Gold Rudbeckia is One Sunshiny Plant.” This 2020 AAS winner was also awarded a Gold Medal from Fleuroselect, an international organization of plant breeders, growers and sellers. These credentials bring high expectations for the garden enthusiast.

*Rudbeckia hirta* ‘Amarillo Gold’ presents a compact form making it perfect for both landscapes and containers. Large 4-6 inch blooms are held high on sturdy 15-16 inch stems. Golden yellow petals surround the light green center disc creating a stunning sight when planted en masse. The soft warm colors mix well with other colors and combinations.

Rudbeckias are easy to grow from seed. The plants in the photo bloomed in less than 5 months after seeding. Plant Amarillo Gold in full to part sun in well drained soil, allowing room for air circulation. Do not overwater or plant near sprinklers as this variety enjoys dry conditions. *Rudbeckia hirta* is classified as an annual; however, even though they may struggle through an active rainy season, you may find them persisting in the garden longer than one season.

Consider adding this ray of sunshine to your garden...it will warm your heart. Visit the AAS gardens in the Botanical Gardens at UF/IFAS Extension St. Johns County where you may discover a new plant you must have in your garden!

