



Microgreens by Maxine Hunter

Microgreens, sometimes called baby greens or vegetable confetti, are edible plants that are harvested at the first true leaf stage. Microgreens are packed with nutrients and antioxidants that can have significant health benefits. They are an easy edition for the home gardener to grow. Seed a tray and within a few weeks plants are ready to harvest. These gourmet toppings can bring color, flavor, and nutrition to the table.

The term “microgreens” is a marketing term. In the eighties cutting edge restaurants introduced this trend. It has spread to the point that commercial operations produce crops sold in specialty stores. They can be found in the produce section in plastic clamshell packaging.



Photo by [Devivahya](#) on [Unsplash](#)

Usually there are variations such as “sweet” or “spicy”. The sooner the product makes it to the table the better, as the nutrition and quality degrade rapidly. Here home gardeners have the advantage. It costs less to grow them at home. Store bought microgreens can be pricey.

Microgreen crops can vary widely. Common crops are kale, beets, amaranth, sunflower, and herbs. They are grown in shallow containers with a growing medium such as mixtures of perlite and vermiculite. Plants are typically harvested once the true leaves develop and the stems reach one to three inches tall. The stems are cut leaving the roots in the growing medium. The same container can be reseeded for another crop. Typically fertilizer is not needed, however, some longer-growing microgreen crops, such as micro carrot, dill, and celery, may benefit from a light fertilization applied to the tray bottom. Some of the faster-growing greens, such as mustard, cress, and chard may also benefit from a light fertilization because they germinate quickly and exhaust their self-contained nutrient supply quickly. Light fertilization is best achieved by floating each tray of microgreens for 30 seconds in a prepared nutrient solution of approximately 80 ppm nitrogen. Plant varieties are usually grouped together by the time it takes germination to occur. Germination times can vary, but usually it takes between ten to fourteen days for growth to appear. Succession plantings are required for ongoing harvests.

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Plant Profile:
American Beautyberry

Callicarpa americana



Photo Source: hort.ufl.edu

Beautyberry is a sprawling, small native shrub that works well in borders or as a specimen plant. The branches form long arches that bend toward the ground. Pale lavender-pink flowers appear along the branches from spring to summer and then mature into shiny purple, jewel-like fruits by September. If not completely devoured by birds, the fruit will persist for several weeks after the leaves drop. Old wood should be pruned heavily in late fall since flowers and fruit are produced on new growth.

USDA Planting Zone: 7—11

Height: 3—8 feet

Spread: 4—8 feet

Light: Full sun to dappled shade

Soil: Sand; loam; clay

pH: Acidic; slightly alkaline

Propagation: Seeds or softwood cuttings.

For more information, visit

edis.ifas.ufl.edu/pdf/files/FP/FP09000.pdf

The home gardener can search online for microgreens and numerous sites will appear. Seed growers sell all types of seeds and growing kits. Colors, textures, and tastes abound. The seeds are the biggest expense. They can be grown inside all year long in a sunny spot or indoors under a grow light. Once the plants reach the desired growth, snip (clean/sterilize tools prior to using), clean, and bring to the table. Both stem and leaves are eaten.

Studies have found these small plants have a much higher nutritional content than their full grown siblings. This is a major benefit for the majority of folks who struggle to eat the recommended amounts of fruits and vegetables. Take note that the quicker the produce reaches the table the better. A handful of these colorful greens will add flavor and texture to sandwiches and salads. Salads can be made with just the microgreens. Smoothies are another option. Some recipes use microgreens in casseroles. As the trend gains in popularity more creative culinary options are sure to evolve.



Radish Microgreens Photo by Russ Ward

Microgreens offer the home gardener a fun and easy way to grow nutritious and flavorful additions for the family table. A small investment of time and money affords the beginner and experienced gardener immediate rewards. Florida offers the prospect of year round gardening which is both exciting and overwhelming, but if a vegetable garden is too much, consider trying a few trays of microgreens seems doable. For more information check out <https://edis.ifas.ufl.edu/hs1164>

Marion County Lawn Watering Days and Times

- Lawn watering is limited to no more than twice per week.
- Lawn watering days and times are as follows unless your city or county has a different schedule or stricter hours in effect:
- Even addresses may water on Thursday and/or Sunday before 10 a.m. or after 4 p.m.
- Odd addresses may water on Wednesday and/or Saturday before 10 a.m. or after 4 p.m.
- Locations without a discernable address, such as rights-of-way and common areas inside a subdivision, may water on Tuesday and/or Friday before 10 a.m. or after 4 p.m.

Hand watering and micro-irrigation of plants (other than lawns) can be done on any day and any time.

Southwest Florida Water Management District 2018

Upcoming Events Oct through Dec

Bellevue Public Library Satellite Plant Clinic

13145 SE Hwy 484, Bellevue
10 a.m.– 1 p.m.

October 4 and 18

November 1 and 15

December 6 and 20

Downtown Farmers Market Satellite Plant Clinic

3rd Ave and 3rd St, Ocala
10:00 a.m.- 1:00 p.m.

October 5

November 2

December 7

Dunnellon Public Library Satellite Plant Clinic

20351 Robinson Rd, Dunnellon
10 a.m.-1 p.m.

October 1

November 5

December 3

Master The Possibilities

On Top Of The World
8415 SW 80th Street, Ocala
10.00 a.m. -11:00 a.m.

Yard Hole Makers: Oct 11

Those Pesky Weeds: Nov 8

Healthy 55

One Health Center
1714 SW 17th St, Ocala
1—2:30 p.m.

Winter Gardening: Oct 31

Gardening Q & A: Nov 21

Winterizing Your Florida Landscape

Amanda Marek, Florida-Friendly Landscaping Agent

It never fails. It's hard to believe but the first day of autumn has arrived! September 23rd marks the official start of the fall season, although Florida it seems hasn't read the memo. Despite the high heat we're still experiencing, plants take the subtlest cues from the changing weather and will begin to prepare for winter in the coming weeks. Here are some basic things you can do to help them out.

Do not fertilize your grass or landscape plants past the first of October, especially if you have zoysia grass that likes to head into dormancy early. All of our turf grass species in this part of the state go dormant in the winter months, roughly November to March depending on the weather. Fertilizing with nitrogen past the end of September or early October will encourage your plants to continue growing when they should be slowing down and getting ready for bed. This causes stress to your lawn and increases the chance of freeze damage and disease, not to mention the increased risk of polluting our water with nutrients the lawn can't readily uptake. Remember, a brown lawn in winter is a healthy lawn!



Photo by Bruno Ramos Lara on Unsplash

Similarly, cut back on the water. While your lawn and landscape plants are dormant, they will require little if any irrigation. Established shrubs and trees that are older than two years old typically don't need water from you anytime of the year, but especially during the winter. Only water your lawn about once every 10-14 days and only when it's needed. As the Southwest Florida Water Management District proclaims, skip a week!

And lastly, avoid doing severe pruning. There are always exceptions, but in general it's best to avoid severe pruning in the fall and winter. Pruning your vegetation back severely this time of year reduces the cover available to overwintering wildlife such as birds and butterflies. It can also encourage your plants to put out new sprouts of tender growth that are particularly susceptible to cold damage. Be patient and wait until the end of March or early April after the chance of hard freeze to prune out old dead growth. On that note, one tree that is commonly pruned in winter are crape myrtles. A selective pruning of some crisscrossing branches with hand pruners is just fine and beneficial, but avoid topping your trees. It's nicknamed crape murder for a reason.

For more questions about preparing your Florida landscape for winter, feel free to contact your UF/IFAS Marion County Extension Service at 352-671-8400 or pay us a visit Monday – Friday. A class on this same topic will also be presented to the public at Master the Possibilities October 16th from 10-11:30. To register, call Master the Possibilities at 352-861-9751.

Good Bugs / Bad Bugs

Milkweed Assassin Bug (Good Bug)



Immature stage (nymph)
Source: Peppersnack.wikipedia.com

The Milkweed Assassin Bug (*Zelus longipes*) has a bright red/orange colored body about ½-inch long, with long black legs, black wings, and long black antenna. They eat a wide variety of insects including aphids, armyworms, caterpillars, stink bugs, houseflies, etc. They are aptly named as they often wait in hiding and ambush their prey. They are able to fly but are poor fliers in general. Although most assassin bugs are slow moving and non-aggressive, if handled carelessly they have a painful bite.

Assassin bugs go through a simple metamorphosis of egg, nymph, and adult. After hatching, the wingless nymphs molt four times before becoming full-sized adults. The immature nymph stages are voracious predators.



Adult Milkweed Assassin Bug
Photo Source: hort.uga.edu

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What To Do After Your Well Is Flooded?

Yilin Zhuang, Water/Energy Extension Agent

Fortunately Hurricane Dorian did not hit us directly, but some areas got a lot of rain in the last couple of weeks. Some areas were flooded. When heavy rains bring flooding to an area, people don't often think about the damage caused to their private drinking wells. If your well has been flooded, such as your well head surrounded by flood waters or it was submerged in flood waters, your private well might be in danger of contamination from pollutants found in the flood waters.

Is My Water Safe?

The only way to know if your water is safe to drink is to have it tested. Bacterial contamination is common after a well is flooded. Find a certified lab to test your water for bacteria (coliform bacteria and *E.coli*). The Environmental Laboratory Certification Program was established in 1979 to ensure laboratory quality and capacity to perform testing of drinking water regulated in the Florida Safe Drinking Water Act. You can assess this link to find a certified drinking water testing lab: https://fldeplc.dep.state.fl.us/aams/org_search.asp. Before you receive your water test result, you need to use alternative safe water sources for drinking, making beverages, cooking, brushing your teeth, washing dishes, and washing areas of the skin that have been cut or injured. Bottled water can be used for these purposes. You can also bring your well water to a rolling boil for at least one minute to kill bacteria.

What To Do After The Lab Confirms Bacterial Contamination In My Well Water

If the test reveals bacteria, the well and water system need to be disinfected. Non-scent chlorine bleach is often used to disinfect a bacterial contaminated well. Keep in mind, the disinfection process includes not only your well but also all the plumbing. If you have water treatment systems or devices, remove all membranes, cartridges, and filters, and replace them after the shock chlorination process is completed.

How To Disinfect My Well

- Pump out the well to remove any potential contaminants. It is at least three well volumes of water from a faucet near the wellhead, or at a minimum, pump the well for at least 1 hour before beginning the disinfection process.
- Flush out household plumbing including water heater. Make sure the water is clear and free of sediment.
- Turn off electric power to the pump and remove the well cap. Prepare a

Good Bugs / Bad Bugs

Leaf-Footed Bug (Bad Bug)



Image by Bill Antalek

Leaf-footed bugs are medium to large sized insects shaped similarly to stink bugs except for distinctive leaf-shaped plates on their back legs. Adults appear in drab colors like tan, gray, brown, and black.

These creatures feed on a wide variety of fruits, vegetables, nuts, and ornamentals. They have long piercing-sucking mouthparts that allow them to feed on plant parts. They particularly like seeds and adults migrate from weedy areas into gardens and landscapes particularly when fruits have started to ripen.

Groups of nymphs may be successfully doused in insecticidal soap, but most insecticides available to homeowners have minimal effect on adults. Hand picking is the best control method.



Nymph. Photo by David R. Haviland

solution of bleach and water, and pour the solution into the top of the well. The amount of bleach depends on the depth of water in the well and the diameter of the well casing. The bleach should be diluted with 10 parts of water. For example, 1 cup of bleach with 10 cups of water before pouring it into your wells.

Well Depth in Feet	Well Diameter in Inch			
	2"	4"	5"	6"
50'	1 cup	2 cups	2 cups	3 cups
80'	1 cup	2 cups	4 cups	4 cups
100'	1 cup	3 cups	4 cups	6 cups
150'	2 cups	4 cups	8 cups	10 cups
200'	3 cups	6 cups	10 cups	12 cups

Table 1. The Amount of Chlorine Bleach to Use for Well Disinfection

* Table 1 is adapted from Florida Department of Health publication "What Should I Do If My Well Is Flooded?"

- Recirculate the water by connecting a hose to a faucet and spraying the water back into the well for at least 10 minutes.
- Open every faucet in the system and let the water run until the smell of chlorine can be detected. Then close all the faucets and seal the top of the well.
- Allow the chlorinated water to stand in the system for at least 12 hours but no longer than 24 hours. You cannot use any water through the system during this period including flushing your toilets. Prepare an alternative water supply during well disinfection process.
- The next day, operate the pump by turning on all faucets, beginning with outside and flushing out the water until there is no chlorine odor.
- You can shock chlorinate the well by yourself following the above steps, or hire a licensed well contractor to disinfect the well.

Is My Water Safe Now?

Again, the only way to verify that the water is safe to drink is to have it tested. Send another



sample to the certified lab to confirm there is no bacteria in your well water first. Although chlorine bleach is effective against microorganisms, it will not remove chemical contamination that may have gotten into your well.

EDIBLES TO PLANT IN OCTOBER

	North	Central	South
 Survives Transplanting	Beets, Broccoli, Cabbage, Cauliflower, Chinese Cabbage, Collards, Kale, Kohlrabi, Lettuce, Strawberry	Beets, Broccoli, Cabbage, Cauliflower, Chinese Cabbage, Collards, Kale, Kohlrabi, Lettuce, Strawberry	Beets, Broccoli, Cabbage, Cauliflower, Chinese Cabbage, Collards, Eggplant, Endive/Escarole, Kale, Kohlrabi, Lettuce, Peppers, Strawberry, Tomatoes
 Transplant With Care	Carrots, Mustard, Spinach	Carrots, Mustard, Spinach	Carrots, Celery, Mustard, Potatoes, Spinach
 Use Seeds	Onions, Radish, Turnips	Onions, Radish, Turnips	Beans (bush, pole, lima), Corn (sweet), Cucumbers, Onions Peas (english, southern), Radish, Squash (summer), Turnips






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Gardening SOLUTIONS

For more information, please visit GardeningSolutions.ifas.ufl.edu

EDIBLES TO PLANT IN NOVEMBER

	North	Central	South
 Easily Survives Transplanting	Beets, Broccoli, Cabbage, Cauliflower, Chinese Cabbage, Collards, Kale, Kohlrabi, Strawberry	Beets, Broccoli, Cabbage, Cauliflower, Chinese Cabbage, Collards, Kale, Kohlrabi, Lettuce, Strawberry	Beets, Broccoli, Cabbage, Cauliflower, Chinese Cabbage, Collards, Endive/Escarole, Kale, Kohlrabi, Lettuce, Pepper, Strawberry, Tomato
 Survives Careful Transplanting	Carrots, Mustard, Spinach	Carrots, Celery, Mustard, Spinach	Carrots, Celery, Mustard, Potato, Spinach
 Use Seeds	Onion, Radish	English Peas, Onion, Radish, Turnip	Beans (bush, pole, lima), Corn (sweet), Cucumber, Peas (English), Radish, Squash (summer), Turnip



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