

Florida Vegetable Gardening Guide¹

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Vegetable gardening offers fresh air, sunshine, exercise, enjoyment, mental therapy, nutritious fresh vegetables, and economic savings, as well as many other benefits (Figure 1). Vegetables can be grown year-round in Florida if attention is paid to the appropriate planting dates (Table 1). Warm season vegetables such as tomatoes and peppers are damaged or killed by frosts and freezes and won't thrive when the soil is too cool. North Florida is especially vulnerable so residents of that region should note the dates of late frosts. (see

https://plantmaps.com/en/us/lf/state/florida/average-last-frost-dates-map). Frosts and freezes occur occasionally in Central Florida and rarely in South Florida.



Figure 1. Vegetable gardening offers fresh air, sunshine, exercise, enjoyment, mental therapy, nutritious fresh vegetables, and economic savings, as well as many other benefits.

Credit: Adobe Stock Image

Planting times are also available on any device from https://floridafresh.ifas.ufl.edu. To use, simply enter your zip code and a list of vegetables will be generated for the time of year. Again, note frost dates for your area and adjust planting times accordingly.

While this guide provides recommendations primarily for traditional home gardens, the information may be useful in other situations, such as community gardens, market gardens, and unconventional approaches like container and raised bed gardens (see *Gardening in Raised Beds* [https://edis.ifas.ufl.edu/ep472]).

Steps in Gardening

Site

For convenience, locate the garden near the house on a well-drained site close to a source of water and in a location that receives at least six hours of direct sunlight daily. With proper care, vegetables may also be included in the landscape among ornamental plants. Coastal sites are also suitable. Where possible, rotate the garden from place to place to help control soil diseases and other pests.

Plan

Before planting, draw a garden plan that includes the name, location, and planting date(s) of the vegetables you want to grow. Use the planting guide (Table 1) to develop your plan. Make a list of supplies and order or purchase seeds early if you intend to grow your own transplants. The planting guide lists which vegetable seedlings transplant easily and which do not. Vegetables that are difficult to transplant should be seeded directly into the garden or started in containers first.

Soil Preparation

Gardeners often plant on whatever soil type is available, but it is usually worthwhile to improve the garden plot with additions of organic matter (see below). This is also a suitable time to do a soil pH test, see "Adjusting Soil pH" below. Spade or plow the plot at least three weeks before planting. At planting time, smooth and firm the soil surface.

Organic Matter

Most Florida soils are low in organic matter and therefore benefit from the addition of organic matter such as animal manure, rotted leaves, compost, commercial soil mixes, and/or cover crops. Composted organics may be applied at planting time; un-composted organics (such as fresh grass clippings) should be composted first or mixed into the soil at least a month before seeding. Due to low and inconsistent levels of nutrients in compost, accompanying applications of inorganic or organic fertilizer may be beneficial (ee "Fertilizing" below). Thoroughly mix liberal amounts of un-composted organics in the soil well in advance of planting, preferably at least a month before seeding. Animal manure if used should be spread at a rate of 25–100 pounds per 100 square feet and should be worked into the soil 90–120 days before harvesting any

vegetables. See *Organic Vegetable Gardening in Florida* (https://edis.ifas.ufl.edu/hs1215).

Compost

Create your own "garden gold" by converting yard wastes to compost (Figure 2). Composting is easy to do and yields a high-quality soil amendment which greatly benefits Florida's infertile native soils. See *Compost Tips for the Home Gardener* (https://edis.ifas.ufl.edu/EP323).



Figure 2. Create your own "garden gold" by converting yard wastes to compost Credit: UF/IFAS

- 1. Buy a compost unit or build one from recycled wood pallets, concrete block, sturdy wire, etc. The minimum size should be 3'×3'×3'.
- 2. Make successive, 3-4-inch-thick layers of plant waste—such as leaves, lawn clippings, shredded branches, and wood chips. Kitchen scraps may also be used
- 3. Animal (not pet) manure, finished compost, blood meal, or fertilizer can be added to each layer if desired.
- 4. Moisten each layer and keep the pile moist.
- 5. Turn the pile frequently to add oxygen and help the decomposition process.
- 6. Depending on how intensively it is managed, compost should be ready for use in two to twelve months, when plant parts are fully decomposed.
- 7. Cover the pile to keep rain from leaching nutrients from it.

Cover Crops (Green Manure)

Cover crops can be planted in off-seasons to prevent erosion and to suppress weeds and nematodes. The following cover crops are recommended for Florida gardens:

- Summer: cowpea, velvet bean, soybean, sunflower, and sunn hemp
- Winter: cereal rye (FL 401), crimson clover, and Austrian winter pea

When a cover crop is turned into the soil, the decaying organic matter (green manure) supplies organic matter and nutrients. Some cover crops, such as sunn hemp, sorghum, and rye, can also suppress nematodes.

For more information, see *Nematode Management in the Vegetable Garden* (https://edis.ifas.ufl.edu/NG005) and *Soil Organic Matter, Green Manures, and Cover Crops For Nematode Management* (https://edis.ifas.ufl.edu/vh037).

Adjusting Soil pH

Soil pH is important because it determines how available nutrients are to plants. The best pH range for vegetable gardens on sandy soil is between pH 5.8 and 6.3. If your soil pH is between 5.5 and 7.0, no adjustment in pH needs to be made.

If your soil pH is below 5.5, apply lime at a rate recommended by a reliable soil testing facility, such as the UF/IFAS Extension Soil Testing Laboratory https://soilslab.ifas.ufl.edu/extension-soil-testing-laboratory/. Two to three pounds of finely ground dolomitic limestone per 100 square feet will usually raise the pH one point. **Caution**: Application of lime when it is not needed may create plant nutrition problems. Lime is best applied two to three months before the garden is to be planted. However, lime may be applied as late as one or two weeks before planting. Make sure the lime is thoroughly mixed into the soil to a depth of 6-8 inches, then water the soil to promote the chemical reaction.

If your soil pH is naturally above 7.0 (alkaline), where limestone, marl, or shells are present, there is no practical way of permanently lowering soil pH. Additions of acidic organic matter will help, but only temporarily. Use a fertilizer that contains micronutrients. If the high pH is the result of previous over-liming, application of granular sulfur (1 lb/100 sq ft) will lower soil pH.

Fertilizing

Unless large quantities of organic matter are applied, commercial synthetic fertilizer is usually needed for Florida gardens. Gardeners find it convenient to use commonly available fertilizer grades such as 10-10-10. However, some Florida soils contain adequate phosphorus (the middle number), and additional amounts should not be added as phosphorus is a pollutant in surface water such as lakes and rivers. A soil test will provide guidelines for the amount of phosphorus and other nutrients to apply.

Using the amount of fertilizer recommended on the product or based on your soil test results, broadcast fertilizer over the entire garden plot just before planting. During the growing season, 2 or 3 light applications of fertilizer can be applied as needed. Apply the fertilizer just beyond the outer leaves. Leafy vegetables such as lettuce, kale, and collards benefit from side dressings of nitrogen-

containing fertilizer such as ammonium nitrate. Tuber and root crops, like carrots and potatoes, respond to potassium fertilizer such as muriate of potash.

More information on organic fertilizers and nutrient management can be found in *Organic Vegetable Gardening in Florida* (https://edis.ifas.ufl.edu/hs1215).

Irrigation and Drainage

Vegetables cannot tolerate standing water from excessive rainfall or irrigation. At the same time, vegetables need soil moisture to grow and produce. Frequency of irrigation depends upon rainfall, the age of the crop, and your soil type. Young plants need frequent but light irrigation; maturing crops need more water but less often. Sandy soil demand more frequent irrigation than clay, muck, or amended soils. Conserve water by adding organic matter to the soil and using mulch. There are diverse types of irrigation, and more than one method may need to be used. Drip irrigation and micro sprayers are among the most efficient systems. See, *Efficient Irrigation for Florida-Friendly Edible Landscapes*

(https://edis.ifas.ufl.edu/publication/EP617). Make a slight depression at the base of plants to hold water until absorbed by the soil.

Extending the Gardening Season

Gardeners can extend the growing season with protective covers and structures that reduce plant stress and damage from hot and cold temperatures. Commercial growers use shade houses, high tunnels, and row covers; gardeners can adopt modifications of these approaches (Figure 3). To learn more, see *Veggies and Herbs Made in the Shade* (https://edis.ifas.ufl.edu/hs1228) and *Row Covers for Growth Enhancement* (https://edis.ifas.ufl.edu/cv106). Remove covers when plants that need bees for pollination begin to flower. These are all the vegetables listed in Table 1 as members of the Squash/Cucurbitaceae family.



Figure 3. Commercial growers use shade houses, high tunnels, and row covers; gardeners can adopt modifications of these approaches.

Credit: UF/IFAS

Pest Management

Pests in the vegetable garden include weeds, insects, mites, diseases, nematodes, and even animals such as raccoons and birds that might consume the vegetable crop.

A gardener has many options for reducing pest problems; see *Natural Products for Managing Landscape and Garden Pests in Florida* (https://edis.ifas.ufl.edu/in197). Pesticides can be harmful to people, pets, beneficial insects, and the natural environment and should be used only after all other pest-management steps have been taken. When choosing pesticides, use the least toxic pesticides first.

No-Pesticide Approaches

- Follow recommended planting date(s) listed for each vegetable in Table 1. However, be aware that vegetables planted in late summer or early fall (August or September) will be susceptible to insects and diseases that thrive in hot weather. Likewise, cold-tender vegetables planted in late winter or early spring may be damaged by frosts or freezes if not protected with covers (see "Extending the Gardening Season" above for more information on covers).
- **Rotate** vegetables so that the same vegetable (or a member of the same vegetable family) is not planted repeatedly in the same areas. The plant family for each vegetable is listed in Table 1.
- Till or hand-turn the soil well in advance of planting to discourage soil insects—especially when the garden is a converted lawn area. The garden soil should be turned and free of weeds, grass, and woody material at least 30 days before planting.
- Control weeds in and around the garden because they can be a source of insects and diseases. Weed control is best accomplished by mulching and hand-pulling or hoeing small weeds. Recommended mulches are straw, fallen leaves, and unfinished compost. Wood mulches and un-decomposed sawdust should not be used. Weeds around the outside of the garden and between rows can be reduced by putting down several layers of newspaper and then covering them with leaves.
- Choose adapted varieties with resistance or tolerance to nematodes and common diseases (Table
 2)
- Purchase healthy transplants that are free of insects and disease symptoms (such as leaf spots or blights).
 Avoid transplants that are already flowering. Consider growing your own transplants from seed (Figure 4).



Figure 4. Consider growing your own transplants from seed. Credit: Adobe Stock Image

- Protect plants from cutworms by placing a collar around the plant stems. The collar can be made from a bottomless plastic cup or a waxed cardboard carton. The collar should extend a few inches above and at least an inch below the surface of the ground.
- Keep plants growing vigorously and in a state of good health by supplying appropriate amounts of water and fertilizer. Healthy plants are often able to survive insect attacks. Too much nitrogen, however, can make plants more inviting to aphids and whiteflies.
- Monitor or scout the garden twice weekly for pest problems. This includes inspecting the plants from the bud to the soil, including both upper and lower leaf surfaces. Record notes on pest problems and the performance of different varieties. Include photographs of insects, diseases, and beneficial insects that you find.
- Identify beneficial insects (praying mantis, spiders, big-eyed bugs, assassin bugs, lady beetles [also called ladybugs or ladybird beetles], and all wasps). Some of these insects can be purchased, but keep in mind that many beneficial insects exist naturally in Florida, and purchased beneficials will leave if there are no insects for them to eat.
- **Plant flowers** in the vegetable garden. They provide nectar and pollen that attract beneficial insects.
- Remove large insects by hand and destroy. Place them in a container of soapy water, where they will sink and drown.
- **Watch for early disease symptoms**. Remove and destroy any diseased leaves or plants to slow spread.
- **Do not panic and start spraying** at the first sign of insect damage. Most plants that produce fruits, pods, or ears can stand a 10%–20% loss of leaves without loss of potential yields.
- Harvest ripe crops promptly. Allowing overripe fruits to remain on the plants often invites additional insect problems.
- Remove unproductive plants and compost or dispose of them.
- **Use soil solarization** to reduce nematodes microscopic worms that attack vegetable roots and reduce growth and yield. This technique uses the sun's

energy to heat the soil and kill soilborne pests. To solarize soil, first remove vegetation, then break up and wet the soil to activate the nematodes. Cover the soil with a sturdy, *clear* plastic film. Weigh down the edges with additional soil to keep the plastic in place. Soil solarization should be done during the warmest six weeks of summer. Hot temperatures (above 130°F) must be maintained for the best results. See *Nematode Management in the Vegetable Garden* (https://edis.ifas.ufl.edu/NG005).

- **Add organic matter** to the soil to help reduce nematode populations. Organic matter improves the capacity of the soil to hold water and nutrients and, in turn, improves plant vigor and resistance to pests.
- See also *Organic Vegetable Gardening in Florida* (https://edis.ifas.ufl.edu/hs1215).

Using Pesticides Wisely

If you choose to use pesticides, refer to Table 3 and follow pesticide label directions carefully.

- Use pesticides only when a serious pest problem exists. Your local UF/IFAS Extension office can provide information about insect identification. Organic gardeners can use certain products (Bt, for example and others; https://edis.ifas.ufl.edu/in197).
- **Protect bees and other pollinators.** Apply insecticides late in the day when they are less active. Malathion, carbaryl, and pyrethroids are especially harmful to bees (Figure 5).
- **Spray the plant thoroughly**, covering both the upper and lower leaf surfaces.
- **Do not apply pesticides**on windy days or when rain is imminent.
- Prevent spray burn; make sure the plants are not under moisture stress. Water, if necessary, and let leaves dry before spraying. Avoid using soaps and oils when the weather is hot.
- Control slugs with products containing iron
 phosphate. Products with metaldehyde as the active
 ingredient are extremely toxic to animals, such as dogs
 and wildlife that may be attracted to the bait.
- Prevent fungus diseases. Purchase fungicide-treated seed. Many common diseases can be controlled by spraying with fungicides if control efforts begin early—ideally before symptoms appear. Look for these "active ingredients" on the label: chlorothalonil, maneb, or mancozeb fungicide. Powdery mildews can be controlled with triadimefon, myclobutanil, sulfur, or horticultural oils. Rusts can be controlled with sulfur, propiconazole, or tebuconazole. Sprays are generally more effective than dusts.
- Read the label. Not every off-the-shelf pesticide can be used on every vegetable or on vegetables at all. Make sure the vegetable and the pest are on the label before purchasing the product. Follow label directions for measuring and mixing. Pay close attention to "waiting periods"—the time that must elapse between

the application of a pesticide and harvest. For example, broccoli sprayed with carbaryl (Sevin®) should not be harvested for two weeks after application. Follow all safety precautions on the label and keep people and pets out of the area until sprays have dried.

UF/IFAS Extension agents are located in every county to advise you further. Contact information can be found at http://sfyl.ifas.ufl.edu/find-your-local-office/.



Figure 5. Apply insecticides late in the day when they are less active. Malathion, carbaryl, and pyrethroids are especially harmful to bees.

Credit: UF/IFAS

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Table 1. Planting guide for Florida vegetables.

	Planting Dates in Florida (Outdoors) ¹		10 ft Is) 10 ft ²		rvest³	Spac (Inch		pth s)	Ability ⁵	nily ⁶	
Crop	North	Central	South	Yield per 10 ft (Pounds)	Plants per 10 ft²	Days to Harvest ³	Plants	Rows ⁴	Seed Depth (Inches)	Trans-plant Ability ⁵	Plant Family ⁶
Arugula	Sept– Mar	Sept- Mar	Oct– Mar	2.5	30 - 40	35-60	3-4	10	1/4	I	(Cabbage) Brassicaceae
Beans, bush	Mar- Apr Aug- Sept	Feb- Apr Aug- Sept	Sept- Apr	4.5	30 - 60	45-60	2-4	18	1–1½	III	(Bean) Fabaceae
Beans, pole	Mar– Apr Aug– Sept	Feb- Apr Aug- Sept	Sept- Apr	8	24 - 40	50-70	3–5	36	1-11/2	III	(Bean) Fabaceae
Beans, lima	Mar– Aug	Feb- Mar Aug- Sept	Sept- Apr	5	20 - 40	60-80	3-6	18	1-11/2	III	(Bean) Fabaceae
Beets	Sept- Mar	Sept- Feb	Oct- Jan	7.5	30 - 60	50-70	2-4	12	1/2 -1	I	(Beet) Chenopodiaceae
Broccoli	Sep- Feb	Sept- Feb	Oct- Jan	5	8- 12	75–90 (50–70)	10-15	24	1/4- 1/2	I	(Cabbage) Brassicaceae
Brussels Sprouts	Sept- Nov	Sept- Feb	Oct- Jan	10	5- 7	90–120 (70–90)	18-24	24	1/4-1/2	I	(Cabbage) Brassicaceae
Cabbage	Sept- Feb	Sept- Feb	Sept- Jan	12	8- 13	85–110 (70–90)	9–16	24	1/4- 1/2	I	(Cabbage) Brassicaceae
Cantaloupes	Late Mar– Apr	Jan- Mar	Dec- Mar	15	4- 6	85–110 (70–90)	20-36	60	1/2-1	III	(Squash) Cucurbitaceae
Carrots	Sept- Mar	Aug- Mar	Sept- Mar	10	40 - 12 0	70-120	1-3	10	1/4	II	(Carrot) Apiaceae
Cauliflower	Jan– Feb Sept– Oct– Feb	Sept- Feb	Sept– Jan	8	7- 10	75–90 (50–70)	12-18	24	1/4-1/2	I	(Cabbage) Brassicaceae
Celery	Jan- Mar	Sept- Mar	Oct- Mar	15	10 - 20	75-90	6–12	18	On surfa ce	II	(Carrot) Apiaceae
Chinese cabbage	Aug- Feb	Sept- Apr	Sept- Apr	10	7- 9	70–90 (60–70)	14-18	14	1/4 - 1/2	I	(Cabbage) Brassicaceae

		ting Dat		10 ft s)	10 ft²	rvest ³	Spac (Inch		pth s)	Ability ⁵	nily ⁶
Crop	North	Central	South	Yield per 10 ft (Pounds)	Plants per 10 ft ²	Days to Harvest ³	Plants	Rows ⁴	Seed Depth (Inches)	Trans-plant Ability ⁵	Plant Family ⁶
Collards	Feb- April Sept- Nov	Sept- Feb	Sept- Jan	15	5- 10	70–90 (50–70)	12-24	24	1/4-1/2	I	(Cabbage) Brassicaceae
Corn, sweet	Mar– Apr Aug	Jan- Apr	Oct- Mar	12	15 - 20	65-90	6-8	28	1–1½	III	(Grass) Poaceae
Cucumbers	Mar– Apr Aug– Sept	Jan- Mar Sept	Sep- Feb	10	10 - 20	40-65	6–12	48	1/2-3/4	III	(Squash) Cucurbitaceae
Eggplant	Mid Mar– Jul	Jan- Feb Aug- Sept	Aug- Feb	20	3- 7	90–115 (70–90)	18-40	36	1/2-3/4	I	(Tomato) Solanaceae
Endive/ Escarole	Feb- Mar Sept	Aug- Feb	Sept- Mar	7.5	8- 9	60-80	14-16	18	1/4	I	(Aster) Asteraceae
Kale	Sept- Feb	Sept- Feb	Sept– Jan	7.5	9– 10	50-70	8–12	18	1/4-1/2	I	(Cabbage) Brassicaceae
Kohlrabi	Sept- Mar	Oct- Mar	Oct- Feb	10	24 - 40	70–80 (50–55)	3-5	24	1/2	I	(Cabbage) Brassicaceae
Lettuce	Feb- Mar	Sept- Feb	Sept- Feb	7.5	10 - 15	60-80	8-12	18	1/4	I	(Aster) Asteraceae
Mustard	Sept- Apr	Sept- Feb	Sept- Jan	10	12 - 24	40-50	5–10	12	1/4-1/2	II	(Cabbage) Brassicaceae
Okra	Late Mar– July	Feb- Aug	Jan– Mar Aug– Oct	7	12 - 30	60-70	4-10	36	1/2-1	III	(Hibiscus) Malvaceae
Onions, bulbing	Sept- Dec	Oct	Oct	10	30	100- 130	4-6	14	1/4-1/2	III	(Lily) Liliaceae
Onions, bunching (green and shallots)	Sep- Mar	Aug- Mar	Sept- Mar	10	30	50–75 (green) 75–100 (shallot s)	2 (green) 6–8 (shallo ts)	14	1/4-1/2	III	(Lily) Liliaceae
Peas, snow or English	Jan- Mar	Nov- Feb	Nov- Feb	4	20 - 60	60-80	2-6	12	1–1½	III	(Bean) Fabaceae

		ting Date la (Outdo		10 ft s)	10 ft²	rvest³		Spacing (Inches) bth Ability (S)		ylly ⁶	
Crop	North	Central	South	Yield per 10 ft (Pounds)	Plants per 10 ft²	Days to Harvest ³	Plants	Rows ⁴	Seed Depth (Inches)	Trans-plant Ability ⁵	Plant Family ⁶
Peas, southern	Mid Mar– Aug	Feb- Aug	Sept– Apr	8	20 - 60	75-90	2-6	12	1-1½	III	(Bean) Fabaceae
Peppers	Late Mar– Apr July– Aug	Jan– Mar Aug– Sept	Aug- Feb	5	8- 13	90–100 (65–75)	9–15	15	1/4-1/2	I	(Tomato) Solanaceae
Potatoes, Irish	Jan- Mar	Nov- Feb	Oct- Jan	15	12 - 24	85–110	5–10	36- 42	3-4 (seed piece s)	II	(Tomato) Solanaceae
Potatoes, sweet	Mid Mar– Jun	Feb- Jun	Dec- Sept	30	10 - 12	85-130	10-12	36	_	Ι	(Morning Glory) Convolvulaceae
Pumpkin	Early July	Mid July	Early Aug	30	2- 4	80-100 (70-90)	36-60	60	1½ -2	III	(Squash) Cucurbitaceae
Radish	Sept- Mar	Sept– Mar	Oct- Mar	4	12 0	20-30	1	6	1/4	III	(Cabbage) Brassicaceae
Spinach	Oct- Nov	Sept- Mar	Oct- Feb	4	20 - 60	45-60	2-6	12	1/2	II	(Beet) Chenopodiaceae
Squash, summer	Late Mar– Apr Aug– Sept	Jan- Apr Aug- Sept	Aug- Mar	15	5- 10	40-50	12-24	36	1-11/2	III	(Squash) Cucurbitaceae
Squash, winter	Feb- Apr Aug- Sept	Jan– Apr Aug– Sept	Aug- Mar	30	2- 4	85–120	36-60	60	1½ -2	III	(Squash) Cucurbitaceae
Strawberry	Oct- Nov	Sept 25- Oct 25	Oct	9–12	8- 10	(30-60)	12-16	12		I	(Rose) Rosaceae
Swiss chard	Sept- Mar	Sept- May	Sept– Mar	8-12	10 - 20	45-60	6-12	18	1/4-1/2	I	(Beet) Chenopodiaceae
Tomatoes (supported)	Late Mar- Apr Aug	Jan– Feb Aug– Sept	Aug- Feb	2	4- 7	90–110 (70–90)	18-32	48	1/4-1/2	I	(Tomato) Solanaceae

		ting Date a (Outdo		10 ft s)	10 ft²	Harvest ³	Spac (Inch	_	oth s)	Ability ⁵	Family ⁶
Crop	North	Central	South	Yield per 10 (Pounds)	Plants per	Days to Hai	Plants	Rows ⁴	Seed Depth (Inches)	Trans-plant	Plant Fan
Turnips	Jan– Apr Sept– Oct	Sept- Feb	Sept- Jan	15	20 - 60	40-60	2-6	12	1/4-1/2	III	(Cabbage) Brassicaceae
Watermelon	Late Mar– Apr July– Aug	Jan– Mar	Dec- Mar	40	3- 5	80-100 (60-90)	24-48	60	1½ -2	III	(Squash) Cucurbitaceae

¹North = all of Florida north of State Road 40; central = the section of Florida between State Roads 40 and 70; south = all of Florida below State Road 70. For more information about Florida's climatic zones, see the USDA Plant Hardiness Zone Map: https://planthardiness.ars.usda.gov/

²Use transplants (if appropriate) or buy the amount of seed needed to grow this many plants per 10 feet of row. Most seed packets state the number of seeds the packet contains.

³Days from seeding to harvest: values in parentheses are days from transplants to first harvest.

⁴Minimum distance between rows (when planting in rows). Row spacing can be reduced or ignored as long as plants are spaced correctly.

⁵Transplant ability (the ability of a seedling to be successfully transplanted): I = easily survives transplanting; II = survives transplanting with care; III = only plant seeds or containerized transplants with developed root systems.

⁶Rotate plant families = avoid successively planting vegetables from the same family in the same area of the garden.

Table 2. Suggested varieties for Florida gardens.

Crop	Recommended Varieties ¹	Notes/Remarks
Arugula	Speedy, Astro	Plant at 2–3 week intervals from fall through spring for a continual harvest. The dark-green, spicy leaves can be steamed, pureed, or used raw in salads and sandwiches. Harvest individual leaves as needed or the entire plant when it is 8–10 inches tall. Hot temperatures cause arugula to flower and become bitter.
Beans, Bush	Snap: Bush Blue Lake, Contender, Roma II, Provider, Cherokee Wax Shell: horticultural, pinto, red kidney, black bean, navy, garbanzo	Bush beans mature early and do not need staking. Fertilize at 1/2 the rate used for other vegetables; too much nitrogen limits production. Flowers self-pollinate. Plant rust-resistant varieties.
Beans, Pole	McCaslan, Kentucky Wonder, Blue Lake, Rattlesnake	Fertilize at ½ the rate used for other vegetables; too much nitrogen limits production. Support vines. May be grown with corn for vine support. Plant rustresistant varieties.
Beans, Lima	Fordhook 242, Henderson, Jackson Wonder, Dixie (Speckled) Butterpea, Early Thorogreen	Pole and bush-types exist; provide trellis support for pole-type varieties. Control stinkbugs that injure pods. Fertilize at ½ the rate used for other vegetables; too much nitrogen limits production. Slightly more heat tolerant than bush or pole beans. Plant rust-resistant varieties.

Crop	Recommended Varieties ¹	Notes/Remarks
Beets	Tall Top, Early Wonder, Detroit Dark Red, Cylindra, Red Ace, Yellow Detroit, Chioggia	Beets require ample moisture at seeding or poor germination will result. Leaves are edible. Thin early to so beet roots have room to enlarge. Very cold tolerant. High in vitamins and iron.
Broccoli	Early Green, Early Dividend, Green Sprouting/Calabrese, Waltham, Packman, De Cicco, Broccoli Raab (Rapini)	Harvest heads before flowers open. Many small side shoots develop after the main head is cut. Very cold hardy and nutritious. Broccoli raab is not related to broccoli.
Brussels Sprouts	Jade Cross, Long Island Improved	Cool weather (58°F–60°F) is required or sprouts will open and not be solid. Sprouts are picked when they are walnut-sized and firm. The first sprouts near the bottom of the plant will be ready first. Pull off the leaves below the mature sprouts, then remove the sprouts by twisting them from the stem. Pick the sprouts at about 2-week intervals and keep refrigerated.
Cabbage	Rio Verde, Flat Dutch, Round Dutch, Wakefield types, Copenhagen Market, Savoy, Red Acre	High in vitamins, especially vitamin C. Long fall/winter planting season. Buy clean plants to avoid cabbage black-rot disease. Needs ample moisture and fertilizer. Frost tolerant. Watch for caterpillars.
Cantaloupes and Honeydews	Athena, Ambrosia, Galia (green flesh)	Bees needed for pollination. Disease prone. Mulch to reduce fruit-rot and salmonella. Overwatering or heavy rainfall reduces sugar content of maturing fruit. Harvest when the fruit cleanly separates from the vine with light pressure.
Carrots	Imperator, Nantes, Danvers, Chantenay	Grow carrots on a raised bed for best results. Sow seeds shallowly. They are slow to germinate. Keep soil consistently moist throughout the germination and growing periods. Thin seedlings to recommended spacing when they are an inch tall. Excellent source of vitamin A
Cauliflower	Snowball Strains, Snow Crown, Brocoverde	Can be difficult to grow. Plants are cold hardy; heads are not. Tie leaves around the head (called blanching) when it is 2–3 inches to prevent discoloration or plant self-blanching varieties.
Celery	Utah strains	Can be a difficult crop in the home garden. Requires high soil moisture during seeding/seedling stage. Needs 3 months or longer to mature. Look for earlymaturing varieties.
Chinese Cabbage	Michihili, bok choy, Napa, baby bok choy, pak-choi, joi choi	Easy to grow. Two types exist: Heading (Pekinensis) and Open-leaf (Chinensis). Bok Choy is open-leaf type, while Michihili and Napa form tighter heads.
Collards	Georgia, Georgia Southern, Top Bunch, Vates	Cold and heat tolerant. Cool-season greens are more flavorful. Greens are ready for use 2 months after planting. Harvest lower leaves; never remove more than 1/3 of the plant at one time. Responds well to nitrogen fertilizer.
Corn, Sweet	Silver Queen (white), How Sweet It Is (white), Sweet Ice (white), Sweet Riser (yellow), Early Sunglow (yellow)	Requires space; plant in blocks of at least 3 rows for good pollination. Isolate different varieties by cross-pollination. Plant where it will not shade other vegetables. Sucker removal is not beneficial. Harvesting in the early morning maintains sugar content. Scout for corn earworm.

Crop	Recommended Varieties ¹	Notes/Remarks
Cucumbers	Slicers: Sweet Success, Poinsett, Ashley, Market More 76, Straight Eight, Space Master Picklers: Eureka, Boston Pickling,	Two types: slicers and picklers. Pickling types can also be used fresh. Burpless varieties exist. Many hybrids are gynoecious (female flowering; only female flowers set fruit). Bees are required for pollination.
	Suyo Long	
Eggplant	Black Beauty, Dusky, Long, Ichiban, Cloud Nine (white)	Requires warm soil and weather. Harvest into summer. May need staking. Bitter fruit is caused by high temperatures or drought conditions.
Endive/Escarole	Endive: Green Curled Ruffec Escarole: Batavian Broadleaf	Excellent ingredient in tossed salads or can be cooked as greens. Bitterness can be reduced by blanching 2–3 weeks before harvest. Escarole (Batavian endive) is a broad-leaved selection.
Kale	Vates Dwarf Blue Curled, Tuscan (lacinato), Winterbor, Redbor	Good source of greens late fall through early spring in north and central Florida. Harvest outer leaves, but no more than 1/3 of the plant at one time. Ornamental types are edible, but not very tasty.
Kohlrabi	Early White Vienna, Purple Vienna	Easy to grow. Red and green varieties exist. Use fresh or cooked. Leaves are edible. Harvest stems when 1½ to 3 inches in diameter.
Lettuce	Crisphead: Great Lakes Butterhead: Ermosa, Bibb, TomThumb, Buttercrunch Loose Leaf: Simpson types, Salad Bowl, Red Sails, New Red Fire, Oak Leaf, Salad Bowl, Royal Oak	Leaf types grow well in Florida; grow crisphead type only in coolest months. Damaged by freezing temperatures. Warm temperatures cause bitterness. Sow seeds very shallow because they need light to germinate. Intercrop lettuce with long-season and/or taller vegetables.
	Romaine: Parris Island Cos, Outredgeous	
Mustard	Southern Giant Curled, Florida Broad Leaf, Tendergreen, Giant Red, Green Wave, Mizuna	Good cooking green fall through spring; harvest outer leaves. Broadleaf types require more space. Damaged by freezing temperatures. Warm temperatures create bitter flavor.
Okra	Clemson Spineless, Emerald, Annie Oakley II, Cajun Delight	Soak seeds in water for 6 hours for better germination. Requires warm soil and temperatures. Very heat tolerant. Highly susceptible to root-knot nematodes. Harvest pods a few days after flower petals have fallen. or pods will become tough and stringy.
Onions	Bulbing: Granex (yellow) Green: Evergreen Bunching, White Lisbon Bunching	Depending on type, onions may be grown from seed, sets, transplants, or division. Bulbing onions must be planted in fall and be short-day varieties. Green/bunching onions may be grown fall through
	Multipliers: Shallots Leeks: American Flag	spring. Plant close and harvest (thin) as needed. Insert sets upright for straight stems. Divide and reset multiplier types every year.
Peas, English or Snow	Wando, Green Arrow, Sugar Snap, Oregon Sugarpod II	Fertilize at ½ rate used for other vegetables; too much nitrogen limits production (as do warm temperatures). May need support depending on type. Consume soon after harvest for best quality.
Peas, Southern (aka Field Peas, Cow Peas, Crowder Peas, Cream Peas)	California Blackeye No.5, Pinkeye Purple Hull, Texas Cream	Highly nutritious. Fertilize at ½ rate used for other vegetables; too much nitrogen limits production. Good summer cover crop. Cowpea curculio is a common pest. Maintain consistent soil moisture.

Crop	Recommended Varieties ¹	Notes/Remarks
Peppers	Sweet: California Wonder, Red Knight, Big Bertha, Sweet Banana, Giant Marconi, Cubanelle Hot: Early Jalapeno, Jalapeno M; Cherry Bomb, Hungarian Hot Wax, Big Chile II, Mariachi, Numex, Ancho, Thai, Anaheim Chile, Long Cayenne, Habanero, Caribbean Red Habanero	Transplants are often more successful than seeds. Mulching is especially beneficial. Will often produce into summer. Pepper "heat" depends on variety and is measured in Scoville units.
Potatoes, Irish	Red Pontiac, Yukon Gold, Gold Rush	Plant 2-ounce certified seed pieces with at least one eye. Each will produce 6–8 potatoes. Do not start with "store bought." Require cool temperatures, moisture, and large amounts of fertilizer.
Potatoes, Sweet	Centennial, Beauregard, Vardaman, Boniato, Porto Rico	Start with certified-free transplants (slips). Use vine tip cuttings for a second crop and prolonged harvest season. Types: moist-flesh (yams) and dry-flesh (e.g., boniata). Bush types conserve garden space. Sweet potato weevils are a serious problem; rotate the planting site.
Pumpkin	Big Max, Connecticut Field, Prizewinner, Jack Be Little, Jack O Lantern, Tropical Pumpkins: Calabaza, Seminole, Moranga	Requires a lot of space but can be grown under taller vegetables. Bees required for pollination. Foliage diseases and fruit-rot are common, although tropical pumpkins are disease resistant.
Radish	Cherry Belle, White Icicle, Sparkler, Champion, Daikon	Easy and fast-growing; thin early and inter-crop with slow-growing vegetables to save space. Plant every two weeks during the growing season for a continuous supply. Spicy, bitter flavor caused by hot weather and over-maturity. Winter/Asian radishes (such as Daikon) also grow well in Florida.
Spinach	Melody 3, Bloomsdale Longstanding, Tyee, Space	Grows best only during the coolest months. Quick maturing. Harvest entire plant or by removing outer leaves. New Zealand spinach and Malabar spinach, although not true spinach, grow well during warm months in Florida. Plant New Zealand spinach or Swiss Chard for summer greens.
Squash	Summer: Early Prolific Straightneck, Summer Crookneck, Early White Scallop, Chayote Zucchini: Cocozelle, Spineless Beauty, Black Beauty, Chayote, Calabaza Winter: spaghetti, Table King, Table Queen & Table Ace (Acorn), Waltham, Early Butternut (butternut)	Summer squash and zucchini are usually bush types; winter squash have a spreading, vining habit. Chayote is a vine that needs support. All cucurbits have male and and female flowers separated on the plant and pollination by insects is required for fruit set. Crossing between types occurs but is only evident when seeds are saved and planted. Leaf and fruit diseases are common. Winter types store well.
Strawberry	North Florida: Camarosa, Encore Central and South Florida: Sweet Sensation, Medallion, Brilliance, Ember, and Encore	Grown as an annual crop in Florida starting with disease-free plants in the fall. Plant only varieties adapted to Florida.
Swiss Chard	Bright Lights, Bright Yellow, Fordhook Giant, Lucullus, Red Ruby	Seeds can be sown in the fall as well as in late winter/early spring. An excellent alternative green for warm weather. Harvest outer leaves when 8–10 inches long. Very susceptible to root-knot nematodes.

Crop	Recommended Varieties ¹	Notes/Remarks
Tomatoes	Large Fruit: Celebrity, Heat Wave II, Better Boy, Better Bush, Beefmaster, BHN444-Southern Star*, Amelia*, BHN 640*, Tasti-Lee™, BHN 685*, BHN 602*, Bella Rosa*, Quincy*, Volante*	Staking/supporting and mulching are beneficial. Flowers self-pollinate. Blossom drop is usually due to too high or too low temperatures and/or excessive nitrogen fertilization. Serious problems include blossom-end rot, wilts, whitefly, and leafminers. Cherry types are heat resistant
	Small Fruit: Sweet 100, Juliet, Red Grape, Sun Gold, Sugar Snack, Sweet Baby Girl	*Resistant to TSWV (Tomato Spotted Wilt Virus)
	Heirloom: Green Zebra, Cherokee Purple, Eva Purple Ball, Brandywine, Mortgage Lifter, Delicious	
Turnips	Roots: Purple Top White Globe Greens: Seven Top, Shogoin	Quick-growing, cool weather crop. Grow for roots and tops (greens). Broadcast seed in a wide-row or single file. Thin early to allow for root expansion. Smaller roots (2") are milder in flavor.
Watermelon	Large: Jubilee (aka FL Giant), Crimson Sweet, Charleston Grey 133 Small: Sugar Baby, Mickeylee	Vines require lots of space. Smaller "ice-box" types exist. Plant disease resistant varieties. Bees required for pollination. "Seedless" types must be interplanted with regular types to dependably bear fruit. Harvest when the melon underside begins to turn yellow or when fruit tendril shrivels.

¹Other varieties may produce well also. Suggestions are based on availability, performance in Florida, and pest resistance.

Table 3. Products currently labeled for insect and mite management in home vegetable gardens. Important: Confirm that the vegetables you are treating are listed on the pesticide label.

Pest						ρ			ъ_	ъ
	Neem ^{d,e}	Spinosad ^{d,e}	Bt ^{a,e}	Carbaryl ^d	Malathion ^d	Pyrethroids ^{b,d}	Soap	Hort. Oil ^{c,e}	Imidacloprid ^d	Acetamiprid ^d
Aphids	Х				Х		Х	Х	Х	Х
Armyworm		Х	Х			Х				
Bean leafroller		Х	Х			Х				
Cabbage looper		Х	Х		Х	Х				
Colorado potato beetle		Х							Х	Х
Corn earworm/ fruitworm		Х	Х			Х				
Cowpea curculio				Х		Х				Х
Cucumber beetle	Х			Х	Х	Х				Х
Diamondback moth caterpillar		Х	Х							

²Information on New Zealand and Malabar spinach, calabaza, chayote, and many other minor vegetables can be found at https://edis.ifas.ufl.edu/topics/minor_vegetables

Flea beetle				Х	Х	Х			Х	Х
Leafminers		Х								
Leafhoppers				Х					Х	Х
Melonworm, pickleworm		Х	Х		Х	Х				
Mexican bean beetle				Х	X	X				Х
Spider mites	Х							Х		
Squash vine borer			Х			X				
Stink bugs						X				Х
Thrips		Х							X	Х
Tomato hornworm, pinworm		Х	Х			Х				
Whiteflies	Х					X	X	Х	X	X

An X means the product is at least somewhat effective for controlling the listed pest. (Refer to the "active ingredient" on product labels to determine which pesticide(s) the product contains. Also note the specific vegetables for which the product can be used. Pay close attention to the waiting period indicated on the label. This is the amount of time that must elapse between pesticide application and harvest.)

^bIncludes bifenthrin, cyhalothrin, cyfluthrin, esfenvalerate, and permethrin. Labeled pests and crops vary by product. Read labels carefully.

Test on a few plants first because of the potential for leaf burn; do not use in hot weather.

^dTo protect bees and other pollinators, do not apply this insecticide when the plant is blooming

^eLeast toxic products

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^aBacillus thuringiensis

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