Florida Vegetable Gardening Guide[1]

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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). Planting dates and other vegetable gardening information are also available as a free mobile app called 'Florida Fresh.' Access an app provider for your mobile phone or download it from http://m.ifas.ufl.edu.

Figure 1.
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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 EDIS publication ENH1211 *Gardening in Raised Beds* (http://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.

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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). Spade or plow the plot at least three weeks before planting. At planting time, rework the soil into a smooth, firm 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 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 (See 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 EDIS Publication HS1215 *Organic Vegetable Gardening in Florida* (http://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 manure-like, organic fertilizer/soil conditioner, which highly benefits Florida's infertile native soils. See EDIS Publication ENH 1065 *Compost Tips for the Home Gardener* (http://edis.ifas.ufl.edu/EP323).

Figure 2.
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1. Buy a compost unit or build one from recycled wood pallets, concrete block, sturdy wire, etc. The minimum size should be 3'x3'x3'.

2. Make successive, 12-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 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 suppress erosion, weeds, or nematodes. The following cover crops are recommended for Florida gardens:

- Summer: cowpea, velvet bean, soybean, and sunflower
- 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.

For more information, see EDIS Publication ENY012 *Managing Nematodes for the Non-Commercial Vegetable Garden* (http://edis.ifas.ufl.edu/NG005).

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 IFAS Extension Soil Testing Laboratory (http://soilslab.ifas.ufl.edu/). 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 cause plant nutritional 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 of 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 very 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. See EDIS Publication Cir 1248 *UF/IFAS Extension Soil Testing Laboratory* (http://edis.ifas.ufl.edu/SS312).

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 outside 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 EDIS Publication HS1215 *Organic Vegetable Gardening in Florida* (http://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 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 soils demand more frequent irrigation than clay, muck, or amended soils. Conserve water by using mulch, organic matter, and techniques such as drip irrigation. 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 the following EDIS publications *Veggies and Herbs Made in the Shade* http://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 (see vegetables listed in Table 1 as members of the Squash/Cucurbitacae family).

Figure 3.
Credits: 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 (See http://edis.ifas.ufl.edu/VH036).

A gardener has many options for reducing pest problems (http://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.

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 members of the same vegetable family) are 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.
- **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.
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- **Protect plants from cutworms** by placing a **collar** around the plant. 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. A healthy plant is 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 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 over-ripe 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 soil-borne pests. To solarize soil, first remove vegetation, then break up and wet the soil to activate the nematodes. Cover the soil with sturdy, clear-plastic film. Weight down the edges with additional soil to keep the plastic in place. Soil solarization should be done during the warmest six weeks of summer. High temperatures (above 130°F) must be maintained for best results.

- **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 EDIS Publication HS1215 *Organic Vegetable Gardening in Florida* (http://edis.ifas.ufl.edu/hs1215).

Using Pesticides Wisely

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

- **Use pesticides only when a serious pest problem exists.** Your county Extension office can provide information about insect identification. Organic gardeners can use certain products (Bt, for example and others http://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).

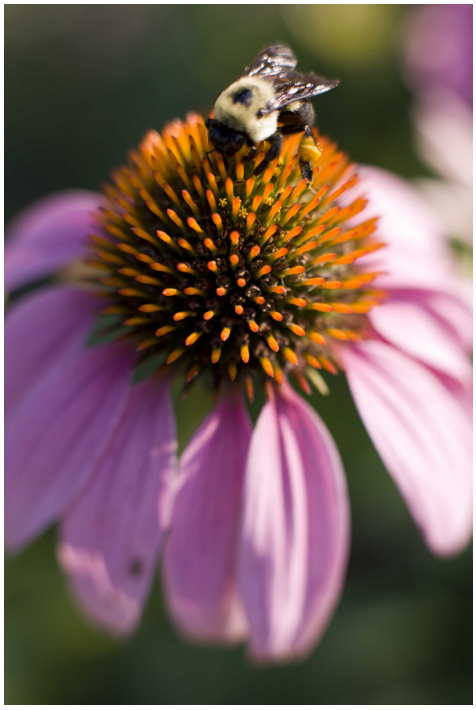

Figure 5.
Credits: UF/IFAS

- **Spray the plant thoroughly**, covering both the upper and lower leaf surfaces.
- **Do not apply pesticides on windy days.**
- **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 very 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 on the label for these chemical names under "active ingredients": 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 others 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 Find Your Local Office (http://sfyl.ifas.ufl.edu/map/index.shtml).

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Table 1. Planting Guide for Florida Vegetables.

Crop	Planting Dates in Florida (outdoors) [1]			Yield per 10 ft (pounds)	Plants per 10 ft [2]	Days to Harvest [3]	Spacing (inches)		Seed depth (inches)	Transplant Ability [5]	Plant Family [6]
	North	Central	South				Plants	Rows [4]			
Arugula	Sept–Mar	Sept–Mar	Oct–Mar	2.5	30–40	35–60	3–4	10	¼	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	1–1½	III	(Bean) Fabaceae
Beans, lima	Mar–Apr Aug	Feb–Mar Aug–Sept	Sept–Apr	5	20–40	60–80	3–6	18	1–1½	III	(Bean) Fabaceae
Beets	Aug–Feb	Sept–Feb	Oct–Jan	7.5	30–60	50–70	2–4	12	½ –1	I	(Beet) Chenopodiaceae
Broccoli	Aug–Feb	Sept–Feb	Oct–Jan	5	8–12	75–90 (50–70)	10–15	24	¼– ½	I	(Cabbage) Brassicaceae
Brussels Sprouts	Aug–Feb	Sept–Feb	Oct–Jan	10	5–7	90–120 (70–90)	18–24	24	¼–½	I	(Cabbage) Brassicaceae
Cabbage	Aug–Feb	Sept–Feb	Sept–Jan	12	8–13	85–110 (70–90)	9–16	24	¼– ½	I	(Cabbage) Brassicaceae
Cantaloupes	Feb–Apr	Jan–Mar	Dec–Mar	15	4–6	85–110 (70–90)	20–36	60	½–1	III	(Squash) Cucurbitaccae
Carrots	Aug–Mar	Aug–Mar	Sept–Mar	10	40–120	70–120	1–3	10	¼	II	(Carrot) Apiaceae
Cauliflower	Aug–Feb	Sept–Feb	Sept–Jan	8	7–10	75–90 (50–70)	12–18	24	¼– ½	I	(Cabbage) Brassicaceae
Celery	Aug–Feb	Sept–Mar	Oct–Mar	15	10–20	75–90	6–12	18	On surface	II	(Carrot) Apiaceae
Chinese cabbage	Aug–Feb	Sept–Apr	Sept–Apr	10	7–9	70–90 (60–70)	14–18	14	¼ – ½	I	(Cabbage) Brassicaceae
Collards	Aug–Feb	Sept–Feb	Sept–Jan	15	5–10	70–90 50–70	12–24	24	¼– ½	I	(Cabbage) Brassicaceae
Corn, sweet	Feb–Apr	Jan–Apr	Oct–Mar	12	15–20	64–90	6–8	28	1–1½	III	(Grass) Poaceae
Cucumbers	Feb–Apr July–Aug	Jan–Mar Sept	Sep–Feb	10	10–20	40–65	6–12	48	½–¾	III	(Squash) Cucurbitaceae
Eggplant	Feb–Mar Aug	Jan–Feb Aug–Sept	Aug–Feb	20	3–7	90–115 (70–90)	18–40	36	½–¾	I	(Tomato) Solanaceae
Endive/ Escarole	Jan–Feb Aug–Oct	Aug–Feb	Sept–Mar	7.5	8–9	60–80	14–16	18	¼	I	(Aster) Asteraceae
Kale	Aug–Feb	Sept–Feb	Sept–Jan	7.5	9–10	50–70	8–12	18–	¼– ½	I	(Cabbage) Brassicaceae
Kohlrabi	Sept–Mar	Oct–Mar	Oct–Feb	10	24–40	70–80 (50–55)	3–5	24	½	I	(Cabbage) Brassicaceae
Lettuce	Jan–Feb Sept–Oct	Sept–Feb	Sept–Feb	7.5	10–15	60–80	8–12	18	¼	I	(Aster) Asteraceae

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	North	Central	South				Plants	Rows [4]			
Mustard	Aug–Feb	Sept–Feb	Sept–Jan	10	12–24	40–50	5–10	12	¼– ½	II	(Cabbage) Brassicaceae
Okra	Mar–June	Feb–Aug	Jan–Mar Aug–Oct	7	12–30	60–70	4–10	36	½–1	III	(Hibiscus) Malvaceae
Onions, Bulbing	Mid-Sept – Mid-Nov	Oct	Oct	10	30	100–130	4–6	14	¼–½	III	(Lily) Liliaceae
Onions, Bunching (Green and Shallots)	Aug–Mar	Aug–Mar	Sept–Mar	10	30	50–75 (green) 75–100 (shallots)	2 (green) 6–8 (shallots)	14	¼–½	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
Peas, southern	Mar–July	Feb–Aug	Sept–Apr	8	20–60	75–90	2–6	12	1–1½	III	(Bean) Fabaceae
Peppers	Feb–Mar July– Aug	Jan–Mar Aug–Sept	Aug–Feb	5	8–13	90–100 (65–75)	9–15	15	¼–½	I	(Tomato) Solanaceae
Potatoes, Irish	Jan–Feb	Nov–Feb	Oct–Jan	15	12–24	85–110	5–10	36–42	3–4 (seed pieces)	II	(Tomato) Solanaceae
Potatoes, sweet	Mar–Jun	Feb–Jun	Dec–Sept	30	10–12	85–130	10–12	36	—	I	(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	120	20–30	1	6	¼	III	(Cabbage) Brassicaceae
Spinach	Sept–Mar	Sept–Mar	Oct–Feb	4	20–60	45–60	2–6	12	½	II	(Beet) Chenopodiaceae
Squash, Summer	Feb–Apr Aug–Sept	Jan–Apr Aug–Sept	Aug–Mar	15	5–10	40–50	12–24	36	1–1½	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	Sept 15– Oct 15	Sept 25– Oct 25	Oct 1– Dec 1	9–12	8–10	(30–60)	12–16	12	– – –	I	(Rose) Rosaceae
Swiss Chard	Sept–May	Sept–May	Sept–Mar	8–12	10–20	45–60	6–12	18	¼–½	I	(Beet) Chenopodiaceae
Tomatoes (supported)	Feb–Apr July–Aug	Jan–Feb Aug–Sept	Aug–Feb	2	4–7	90–110 (70–90)	18–32	48	¼– ½	I	(Tomato) Solanaceae
Turnips	Aug–Feb	Sept–Feb	Sept–Jan	15	20–60	40–60	2–6	12	¼– ½	III	(Cabbage) Brassicaceae
Watermelon	Feb–Apr	Jan–Mar	Dec–Mar	40	3–5	80–100 (60–90)	24–48	60	1½ –2	III	(Squash) Cucurbitaceae

[1] North = 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.
[2] Use 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.
[3] Days from seeding to harvest: values in parentheses are days from transplants to first harvest.
[4] Minimum distance between rows (when planting in rows). Row spacing can be reduced or ignored as long as plants are spaced correctly.
[5] Transplant 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.
[6] Rotate 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. High 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	Fertilize at 1/2 the rate used for other vegetables; too much nitrogen limits production. Support vines. May be grown with corn for vine support. Plant rust-resistant 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 1/2 the rate used for other vegetables; too much nitrogen limits production. Slightly more heat tolerant than bush or pole beans. Plant rust-resistant varieties.
Beets	Tall Top, Early Wonder, Detroit Dark Red, Cylindra, Red Ace, Yellow Detroit	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 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 (58–60°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 very high soil moisture during seeding/seedling stage. Needs 3 months or longer to mature. Look for early-maturing varieties.
Chinese Cabbage	Michihili, bok choy, Napa, baby bok choy, pak-choi, joi choi	Easy to grow. Two types exist: Heading (Pekinensis) or 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. Respond, 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 not beneficial. Harvesting in early morning maintains sugar content. Scout for corn earworm.

CROP	RECOMMENDED VARIETIES[1]	NOTES/REMARKS
Cucumbers	**Slicers**: Sweet Success, Poinsett, Ashley, MarketMore 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.
Eggplant	Black Beauty, Dusky, Long, Ichiban, Cloud Nine (white)	Requires warm soil and weather. Harvest into summer. May need staking. Bitter fruit 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 1 ½ to 3 inches in diameter.
Lettuce	**Crisphead**: Great Lakes **Butterhead**: Ermosa, Bibb, Tom Thumb, Buttercrunch **Loose Leaf**: Simpson types, Salad Bowl, Red Sails, New Red Fire, Oak Leaf, Salad Bowl, Royal Oak **Romaine**: Parris Island Cos, Outredgeous	Leaf types grows well in Florida; grow crisphead type only in coolest months. Damaged by freezing temperatures. Warm temperatures cause bitterness. Sow seeds very shallow as they need light to germinate. Intercrop lettuce with long-season and/or taller vegetables.
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 soils and temperatures. Very heat tolerant. Highly susceptible to root-knot nematodes. Harvest pods a few days after flower petals have fallen or pods become tough and stringy.
Onions	**Bulbing**: Granex (yellow) **Green**: Evergreen Bunching, White Lisbon Bunching **Multipliers**: Shallots **Leeks**: American Flag	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 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 1/2 rate used for other vegetables; too much nitrogen limits production (as does 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 1/2 rate used for other vegetables; too much nitrogen limits production. Good summer cover crop. Cowpea curculio is a common pest. Maintain consistent soil moisture.
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 often more successful than seeds. Mulching especially beneficial. Will often produce into summer. Pepper "heat" depends on variety and is measured in Scoville units.
Potato, 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.

CROP	RECOMMENDED VARIETIES[1]	NOTES/REMARKS
Potatoes, Sweet	Centennial, Beauregard, Vardaman, Boniato	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, calabaza	Requires a lot of space but can be grown under taller vegetables. Bees required for pollination. Foliage diseases and fruit-rot are common.
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/Oriental 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. Calabaza is similar, but is a heat-and disease-resistant hard-shelled squash, similar to a butternut or acorn in taste. 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. Leaf and fruit diseases are fairly common. Winter types store well.
Strawberry	Chandler, Oso Grande, Sweet Charlie, Selva, Camarosa, Festival	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.
Tomatoes	**Large Fruit:** Celebrity, Heat Wave II, Better Boy, Beefmaster, BHN444-Southern Star*, Amelia*, BHN 640*, Tasti-Lee™ **Small Fruit**: Sweet 100, Juliet, Red Grape, Sun Gold, Sugar Snack, Sweet Baby Girl **Heirloom**: Green Zebra, Cherokee Purple, Eva Purple Ball, Brandywine, Mortgage Lifter, Delicious	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 *Resistant to TSWV (Tomato Spotted Wilt Virus)
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 melon underside begins to turn yellow or when fruit tendril shrivels.

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

[2] Information on New Zealand and Malabar spinach, Calabaza, Chayote, and many other minor vegetables can be found at: http://edis.ifas.ufl.edu/topic_minor_vegetables

Table 3. Products currently labeled for insect and mite management in home vegetable gardens.

Pest	Neem[d,e]	Spinosad[d,e]	Bt[a,e]	Carbaryl[d]	Malathion[d]	Pyrethroids[b,d]	Soap[c,e]	Hort. Oil[c,e]	Imidacloprid[d]	Acetamiprid[d]
Aphids	X				X		X	X	X	X
Armyworm		X	X			X				
Bean leafroller		X	X			X				
Cabbage looper		X	X		X	X				
Colorado potato beetle		X							X	X
Corn earworm/ fruitworm		X	X			X				
Cowpea curculio				X		X				X
Cucumber beetle	X			X	X	X				X
Diamondback moth caterpillar		X	X							
Flea beetle				X	X	X			X	X
Leafminers		X								
Leafhoppers				X					X	X
Melonworm, pickleworm		X	X		X	X				
Mexican bean beetle				X	X	X				X
Spider mites	X							X		
Squash vine borer			X			X				
Stink bugs						X				X
Thrips		X							X	X
Tomato hornworm, pinworm		X	X			X				
Whiteflies	X					X	X	X	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.)

[a] *Bacillus thuringiensis*

[b] Includes bifenthrin, cyhalothrin, cyfluthrin, esfenvalerate, and permethrin. Labeled pests and crops vary by product. Read labels carefully.

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

[d] To protect bees and other pollinators, do not apply this insecticide when the plant is blooming

[e] Least toxic products