

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. Vegetables can be grown year-round in Florida if attention is paid to the appropriate planting dates. While this guide provides recommendations primarily for home gardens, the information may be useful in other situations, such as container, community, and market gardens.

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 3) 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). 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 benefit from the addition of organic matter, such as animal manure, rotted leaves, compost, commerical soil mixes, and cover crops. Thoroughly mix liberal amounts of (un-composted) organics in the soil well in advance of planting, preferably at least a month before seeding. If you do not plan to use inorganic fertilizer, spread 25 - 100 pounds of compost or composted animal

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manure per 100 square feet. Composted organics may be applied at planting time. However, aged or raw manures should be worked into the soil 90-120 days before havesting. Due to inconsistent levels of nutrients in compost, accompanying applications of inorganic or organic fertilizer may be beneficial. To avoid plant stunting, organic amendments low in nitrogen (such as composted yard debris) must be accompanied by fertilizer. See EDIS Publication CIR375 *Organic Vegetable Gardening*, (http://edis.ifas.ufl.edu/VH019).

COMPOST

Create your own "garden gold" by converting yard wastes to compost. 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).

- 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

Green manure is fresh plant material turned into the soil. Planting and plowing in green-manure crops during the off-season is beneficial. The following cover crops are recommended: cowpea, velvet bean, soybean, and sunflower in summer and cereal rye (FL 401), crimson clover, and Austrian winter pea in winter.

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 governs 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 - 8 inches and 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 fertilizer materials are applied, commercial synthetic fertilizer is usually needed for Florida gardens. Gardeners find it convenient to use commonly available fertilizer grades, such as 6-6-6 or 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 can determine whether phosphorus is needed. See EDIS Publication Cir 1248 *UF/IFAS Extension Soil Testing Laboratory* (http://edis.ifas.ufl.edu/SS312).

The quantities shown in Table 1 are usually sufficient. If a different fertilization recommendation accompanies your soil test results, use those specific recommendations rather than the general ones given here.

Broadcast the indicated amount of fertilizer over the entire garden plot before planting. Band the other portion at planting time along the plant rows. The fertilizer should be applied 2 - 3 inches to the side of, and 1 - 2 inches below the seed level or plant row.

In addition, during the growing season, it may be necessary to apply fertilizer two or three more times at half the banded rate shown in the table. Apply the fertilizer just beyond the outside leaves.

Irrigation and Drainage

Vegetables cannot tolerate standing water from excessive rainfall or irrigation. Yet, 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.

Pest Management

'Pests' in the vegetable garden include weeds, insects, mites, diseases, nematodes – and even animals such as raccoons and birds that might reduce yields.

A gardener has many options for reducing pest problems. 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 the recommended planting date(s) listed for each vegetable. Vegetables planted "out of season" are very susceptible to many pests. Plant as early in the spring (or as late in the fall, depending on the crop) as is safely possible. Use protective covers for cold-sensitive plants.
- 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 3.
- Till or hand-turn the soil well in advance of planting.
 Insects, such as mole crickets and wireworms, for which there is no good control, are commonly more abundant in gardens that have recently been in grass. The garden

- should be well tilled 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 the diseases common in your area.
- Purchased transplants should be free of insects and disease symptoms (such as leaf spots or blights). Avoid transplants that are already flowering. Consider growing your own from seed.
- Plants can be protected 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.
- Lightweight row covers (also called floating row covers) can be used as a barrier to insects. Put in place at planting, with lots of excess material to leave room for the growing plant. Remove the cover when plants that need bees for pollination begin to flower (i.e., vegetables listed in Table 3 as members of the Cucurbitacae Family).
- Keep plants vigorously growing 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.
- Learn to identify beneficial insects (praying mantis, spiders, big-eyed bugs/assassin bugs, lady 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.
- Large insects can be removed by hand and destroyed.
 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.
- Most plants that produce fruits, pods, or ears can stand a 10 – 20 percent loss of leaves without loss of potential yields. Do not panic and start spraying at the first sign of leaf feeding.
- Harvest crops such as tomatoes, peppers, squash, and beans as soon as they are ripe. Allowing over-ripe fruits to remain on the plants often invites additional insect problems.
- As soon as a plant or crop is no longer productive, remove it from the garden and compost or dispose of it.
- Reduce nematode populations temporarily by "soil solarization" a technique that 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 - microscopic worms that attack vegetable roots and reduce growth and yield. 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 CIR375, Organic Vegetable Gardening (http://edis.ifas.ufl.edu/VH019).

Using Pesticides Wisely

If you choose to use pesticides, refer to Table 2 and follow pesticide label directions carefully.

 Learn to properly identify garden pests and use chemicals 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).
- 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, and pay attention to any 'pre-harvest interval' - the time that must elapse between application of the pesticide and harvest. For example, broccoli sprayed with carbaryl (Sevin) should not be harvested for two weeks.
- Spray the plant thoroughly, covering both the upper and lower leaf surfaces.
- Do not apply pesticides on windy days.
- Follow all safety precautions on the label and keep others and pets out of the area until sprays have dried.
- Apply insecticides late in the afternoon or in the early evening when bees and other pollinators are less active.
 Malathion, Carbaryl, and pyrethroids are especially harmful to bees.
- To reduce 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.
- Diseases Plant fungicide-treated seed. Dust untreated seed with a captan fungicide. Many common diseases can be controlled with sprays of 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. Begin control efforts early.

Table 1. Fertilizer Recommendations

| | | Amount | to Apply |
|---------------------------------------|---------------------|----------------------------|------------------------|
| Soil | Fertilizer grade | broadcast lb./100 sq ft | 10ft/row banded oz. |
| Sand, marl, rock, or clay | 4-2-4 | 4 | 6 |
| • | 6-6-6 | 3 | 5 |
| | 8-10-10 | 2 | 4 |
| | 9-0-9 | 2 | 4 |
| Organic soils (muck, peat, oramended) | 0-12-20 | 1-2 | 2 |

Table 2. Insect Control Recommendations

| Refer to th | ne "active i | ngredient" on | product | t labels to det | ermine which | pesticide(s) th | e product | contains | |
|------------------------|--------------|-----------------------|--------------|-----------------|--------------|--------------------------|-----------|----------|---------------------------|
| Pest | Neeme | Spinosad ^e | Bt ae | Carbaryl | Malathion | Pyrethroids ^b | Soapce | Oilce | Imidacloprid ^d |
| Aphids | Χ | | | | Х | X | X | Χ | X |
| Armyworm | | Χ | Χ | X | | Х | | | |
| Bean leafroller | | Χ | Χ | Х | | Х | | | |
| Cabbage looper | | X | Χ | | X | Х | | | |
| Col. potato beetle | | Χ | | Х | | Х | | | Х |
| Cucumber beetle | Χ | | | Х | Х | X | | | |
| Diamondback moth | | X | Χ | | | | | | |
| Corn earworm/fruitworm | | Χ | Χ | Х | | Х | | | |
| Flea beetle | | | | Х | Х | X | | | Х |
| Hornworm, pinworm | | X | Χ | Х | | Х | | | |
| Leafminers | | | | | | Х | | | |
| Leafhoppers | | | | Х | Х | Х | | | Х |
| Melon, pickleworm | | Χ | Χ | Χ | | Х | | | |
| Mexican bean beetle | | | | Х | Х | Х | | | |
| Cowpea curculio | | | | Х | | | | | |
| Spider mites | | | | | Х | | | Х | |
| Squash vine borer | | Х | Χ | | | Х | | | |
| Stink bugs | | X (nymphs) | | X (nymphs) | | X (adults) | | | |
| Thrips | | Х | | | Х | | Х | Χ | |
| Whiteflies | Χ | | | | | Х | Х | Χ | Х |

^aBacillus thuringiensis (several brands).

 $^{^{\}mathrm{b}}$ Includes bifenthrin, lamda-cyhalothrin, esfenvalerate, and pyrethrins + PBO.

Test on a few plants first because of potentional leaf burn and do not use in hot weather.

^dThis pesticide requires a waiting period before harvesting of 7 to 45 days (depending on the crop).

^eLeast toxic products.

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| Crop | Planti | Planting Dates in Florida (outdoors)¹ | lorida | Plant Family ² | Transplantability ³ | Pounds yield | Days to Harvest⁴ | Seeds/ plants | Spacing | Spacing (inches) | Seed depth |
|---|--------------------|--|--------------------|---------------------------|---------------------------------------|--------------|---------------------|-----------------------|---------|------------------|---------------|
| | North | Central | South | | | per100′ | | Per 100′ | Rows | Plants | (inches) |
| Beans, bush | Mar-Apr Aug-Sep | Feb-Apr Sep | Sep-Apr | Fabaceae | = | 45 | 20-60 | 1 lb. | 18-30 | 2-3 | 1-2 |
| Beans, pole | Mar-Apr Aug-Sep | Feb-Apr Aug-Sep | Aug-Apr | Fabaceae | = | 80 | 55-70 | ½ lb. | 40-48 | 3-6 | 1-2 |
| Beans, lima | Mar-Aug | Feb-Apr Sept. | Aug-Apr | Fabaceae | = | 20 | 65-75 | 2 lb. | 24-36 | 3-4 | 1-2 |
| Beets | Sep-Mar | Oct-Mar | Oct-Feb | Chenopodiaceae | _ | 75 | 50-65 | 1 oz. | 14-24 | 3-5 | 1/2 -1 |
| Broccoli | Aug-Feb | Aug-Jan | Sept-Jan | Brassicaceae | _ | 20 | 75-90 | 100 plts (1/8 oz.) | 30-36 | 12-18 | 1/2 - 1 |
| Cabbage | Sep-Feb | Sep-Jan | Sep-Jan | Brassicaceae | _ | 125 | 90-110 (70-90) | 100 plts (1/8 oz) | 24-36 | 12-24 | 1/2 -1 |
| Cantaloupes | Mar-Apr | Feb-Apr | Aug-Sep Feb-Mar | Cucurbitaccae | = | 150 | 75-90 (65-75) | ½ oz. | 60-72 | 24-36 | 1-2 |
| Carrots | Sep-Mar | Oct-Mar | Oct-Feb | Apiaceae | = | 100 | 65-80 | 1/8 oz. | 16-24 | 1-3 | 1/2 |
| Cauliflower | Jan-Feb Aug-Oct | Oct-Jan | Oct-Jan | Brassicaceae | _ | 80 | 75-90 (55-70) | 55 plts (1/8 oz) | 24-30 | 18-24 | 1/2 -1 |
| Celery | Jan-Mar | Aug-Feb | Oct-Jan | Apiaceae | = | 150 | 115-125 (80-105) | 150 plts (1/8 oz) | 24-36 | 6-10 | 1/4 - 1/2 |
| Chinese cabbage | Oct-Feb | Oct-Jan | Nov-Jan | Brassicaceae | _ | 100 | 70-90 (60-70) | 125 plts (1/8 oz) | 24-36 | 12-24 | 1/4 - 3/4 |
| Collards | Feb-Apr Aug-Nov | Aug-Mar | Aug-Feb | Brassicaceae | _ | 150 | 70-80 | 100 plts (1/8 oz) | 24-30 | 10-18 | 1/2 -1 |
| Corn, sweet | Mar-Apr Aug | Feb-Mar Aug-Sep | Aug-Mar | Poaceae | = | 115 | 96-09 | 2 oz. | 24-36 | 12-18 | 1-2 |
| Cucumbers | Feb-Apr Aug-Sep | Feb-Mar Sep | Sep-Mar | Cucurbitaceae | = | 100 | 50-65 (40-50) | ½ 0Z. | 36-60 | 12-24 | 1-2 |
| Eggplant | Feb-July | Jan-Mar Aug-Sep | Dec-Feb Aug-Oct | Solanaceae | _ | 200 | 90-110 (75-90) | 50 plts 1 pkt | 36-42 | 24-36 | 1/2 |
| Endive/ Escarole | Feb-Mar Sep | Jan-Feb Sep | Sep-Jan | Asteraceae | _ | 75 | 80-95 | 100 plts | 18-24 | 8-12 | 1/2 |
| Kale | Sep-Feb | Sep-Jan | Sep-Jan | Brassicaceae | _ | 75 | 70-80 (55) | 100 plts (1/8 oz) | 24-30 | 12-18 | 1/2 -1 |
| Kohlrabi | Sep-Mar | Oct-Mar | Oct-Feb | Brassicaceae | _ | 100 | 70-80 (50-55) | 1/8 oz. | 24-30 | 3-5 | 1/2 -1 |
| Lettuce: Crisp, Butter- head, Leaf & Romaine | Feb-Mar Sep-Oct | Sep-Mar | Sep-Jan | Asteraceae | _ | 75 | 50-90 | 100 plts (1/4 oz.) | 12-24 | 8-12 | 1/2 |

| Crop | Planti | Planting Dates in Florida (outdoors)¹ | lorida | Plant Family ² | Transplantability ³ | Pounds yield | Days to Harvest⁴ | Seeds/ plants | Spacing (inches) | (inches) | Seed depth |
|--|---------------------|--|--------------------|---------------------------|--------------------------------|--------------|----------------------|--------------------------------------|------------------|----------|---------------|
| | North | Central | South | | | per100′ | | Per 100′ | Rows | Plants | (inches) |
| Mustard | Sep-May | Sep-Mar | Sep-Mar | Brassicaceae | = | 100 | 40-60 | 1/4 OZ. | 14-24 | 1-6 | 1/2 -1 |
| Okra | Mar-July | Mar-Aug | Aug-Sep | Malvaceae | = | 70 | 50-75 | 1 oz. | 24-40 | 6-12 | 1-2 |
| Onions, Bulbing | Sep-Dec | Sep-Dec | Sep-Nov | Liliaceae | ≡ | 100 | 120-160 (110-120) | 300 plts/ sets, 1 oz seed | 12-24 | 4-6 | 1/2 -1 |
| Onions, Bunching (Green onions) | Aug-Mar | Aug-Mar | Sep-Mar | Liliaceae | ≡ | 100 | 50-75 (30-40) | 800 plts/ sets, 1 - 1½ oz seed | 12-24 | 1-2 | 2-3 |
| Onions (Shallots) | " | 7 | 7 | Liliaceae | = | 100 | (30-40) | TI TI | 18-24 | 8-9 | 1/2 - 3/4 |
| Peas, English | Jan-Mar | Sep-Mar | Sep-Feb | Fabaceae | = | 40 | 50-70 | 1 lb. | 24-36 | 2-3 | 1-2 |
| Peas, southern | Mar-Aug | Mar-Sep | Aug-Apr | Fabaceae | ≡ | 80 | 06-09 | ½ 0Z. | 30-36 | 2-3 | 1-2 |
| Peppers | Feb-Apr July-Aug | Jan-Mar Aug-Sep | Aug-Mar | Solanaceae | _ | 50 | 80-100 (60-80) | 100 plts 1 pkt | 20-36 | 12-24 | 1/2 |
| Potatoes | Jan-Mar | Jan-Feb | Sep-Jan | Solanaceae | = | 150 | 85-110 | 15 lbs. | 36-42 | 8-12 | 3-4 |
| Potatoes, sweet | Mar-Jun | Feb-Jun | Feb-Jun | Convolvulaceae | _ | 300 | (120-140) | 100 plts | 48-54 | 12-14 | I |
| Pumpkin | Mar-Apr Aug | Feb-Mar Aug | Jan-Feb Aug-Sep | Cucurbitaceae | ≡ | 300 | 90-120 (80-110) | 1 oz. | 60-84 | 36-60 | 1-2 |
| Radish | Sep-Mar | Sep-Mar | Oct-Mar | Brassicaceae | | 40 | 20-30 | 1 oz. | 12-18 | 1-2 | 3/4 |
| Spinach | Oct-Nov | Oct-Nov | Oct-Jan | Chenopodiaceae | = | 40 | 45-60 | 1 oz. | 14-18 | 3-5 | 3% |
| Squash, Summer | Mar-Apr Aug-Sep | Feb-Mar Aug-Sep | Jan-Mar Sep-Oct | Cucurbitaceae | ≡ | 150 | 40-55 (35-40) | 1½ oz. | 36-48 | 24-36 | 1-2 |
| Squash, Winter | Mar Aug | Feb-Mar Aug | Jan-Feb Sep | Cucurbitaceae | ≡ | 300 | 80-110 (70-90) | 1 oz. | 06-09 | 36-48 | 1-2 |
| Strawberry | Oct-Nov | Oct-Nov | Oct-Nov | Rosaceae | _ | 50 | (90-110) | 100 plts | 36-40 | 10-14 | 1 |
| Tomatoes, Stake | Feb-Apr Aug | Jan-Mar Sep | Aug-Mar | Solanaceae | _ | 200 | 90-110 (75-90) | 70 plts 1 pkt | 36-48 | 18-24 | 7,7 |
| Tomatoes, Ground | " | n . | II . | Solanaceae | _ | 200 | 90-110 (75-90) | 35 plts 1 pkt | 40-60 | 36-40 | 7,7 |
| Tomatoes, Container | " | n . | II . | Solanaceae | _ | 200 | 90-110 (75-90) | | | | |
| Turnips | Jan-Apr Aug-Oct | Jan-Mar Sep-Nov | Oct-Feb | Brassicaceae | ≡ | 150 | 40-60 | 1/4 OZ. | 12-20 | 4-6 | 1/2 -1 |

| Crop | Planti | Planting Dates in Florida (outdoors) | lorida | Plant Family ² | Transplantability ³ | Pounds yield | Days to Harvest⁴ | Seeds/ plants | Spacing (inches) | (inches) | Seed depth |
|-------------------------|---------------------|--------------------------------------|--------------------|---------------------------|--------------------------------|--------------|---------------------|------------------|------------------|----------|---------------|
| | North | Central | South | | | per100′ | | Per 100′ | Rows | Plants | (inches) |
| Watermelon, Large | Mar-Apr July-Aug | Jan-Mar Aug | Jan-Mar Aug-Sep | Cucurbitaceae | = | 400 | 85-95 (80-90) | 1/8 oz. | 84-108 | 48-60 | 1-2 |
| Watermelon, Small | * | 2 | 2 | Cucurbitaceae | ≡ | 400 | 85-95 (80-90) | 1/8 oz. | 48-60 | 15-30 | 11 |
| Watermelon, Seedless | = | = | = | Cucurbitaceae | = | 400 | 85-95 (80-90) | 70 plts | 48-60 | 15-30 | = |

¹ **North**: north of State Rd 40; **Central**: between State Rds 40 and 70; **South**: south of State Rd 70.
² Rotate crops to avoid soil pest problems; avoid planting vegetables belonging to the same family in successive seasons.
³ Transplantability categories: I, easily survives transplanting; II, survives with care; III, use seeds or containerized transplants only.
⁴ Days from seeding to harvest: Values in parentheses are days from transplanting to first harvest.

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| GROP RECOMMENDED VARIETIES¹ Beans, Bush Snap: Bush Blue Lake, Contender, Roma II, Provider, Cherokee Wax Shell: Horticultural, Pinto, Red Kidney, Black Bean, Ni Beans, Jima McCaslan, Kentucky Wonder, Blue Lake Beans, Jima McCaslan, Kentucky Wonder, Blue Lake Beets Fordhook 242, Henderson, Jackson Wonder, Dixie (Speckled) Butterpea, Early Thorogreen Tall Top, Early Wonder, Detroit Dark Red, Cylindra, Red Ace, Yellow Detroit Ace, Yellow Detroit Early Green, Early Dividend, Green Sprouting/Calabri Waltham, Packman, De Cicco, Broccoli Raab (Rapini) Robbage Rio Verde, Flat Dutch, Round Dutch, Wakefield types, Copenhagen Market, Savoy, Red Acre Cauliflower Athena, Ambrosia, Galia (green flesh) Honeydews Imperator, Nantes, Danvers, Chantenay Celery Snowball Strains, Snow Crown, Brocoverde Chinese Cabbage Snowball Strains, Snow Crown, Brocoverde Choi Georgia, Georgia Southern, Top Bunch, Vates Corn, sweet Silver Queen (white), How Sweet It Is (white), Sweet It (white), Savet Success, Poinsett, Ashley, MarketMore 76, Straight Eight, Space Master 76, Straight Eight, Space Master Picklers: Liberty Hybrid, Eureka, Boston Pickling | Roma II, Provider, | NOTES/REMARKS Fertilize at 1/2 rate used for other vegetables. Seed inoculation not essential for most soils. Flowers self-pollinated. Use shell beans green or dry. Roma is a flat pod type. Cherokee is a |
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| Bush pole lima li li li s coupes and dews s cower li ls weet weet | Roma II, Provider, | ertilize at 1/2 rate used for other vegetables. Seed inoculation not essential for most soils. lowers self-pollinated. Use shell beans green or dry. Roma is a flat pod type. Cherokee is a |
| lima li li li see Cabbage e Cabbage bers | Shell: Horticultural, Pinto, Red Kidney, Black Bean, Navy 🛚 y | yellow wax. |
| lima li bupes and dews s c cabbage ls weet bers | | Support vines. May be grown with corn for vine support. |
| li oupes and dews s ower ls weet | | Provide trellis support for pole varieties. Control stinkbugs that injure seeds in pods. Fordhook is large-seeded; Henderson is "butterbean" type. |
| li bupes and dews s wwer weet | Tall Top, Early Wonder, Detroit Dark Red, Cylindra, Red Ace, Yellow Detroit | Beets require ample moisture at seeding or poor germination results. Leaves are edible. |
| oupes and dews seconds ower becapage ls weet bers | ese, | Harvest small multiple side shoots that develop after main central head is cut. Broccoli Raab is not related to broccoli. |
| oupes and dews bwer c Cabbage ls weet | | Buy clean plants to avoid cabbage black-rot, a common bacterial disease that causes yellow patches on leaf margins. Keep an eye out for looper caterpillars; use Bt for control. |
| ower e Cabbage ls weet bers | | Bees needed for pollination. Mulch to reduce fruit-rot and salmonella. Harvest when the fruit cleanly separates from the vine with light pressure. |
| ower e Cabbage ls weet | | Grow carrots on a raised bed for best results. Sow seeds shallow and thin seedlings to recommended spacing. |
| e Cabbage Is weet bers | coverde | Tie leaves around the head when it is 2-3 inches to prevent discoloration. Brocoverde is green-headed. |
| | | Celery requires very high soil moisture during seeding/seedling stage. |
| | Michihili, Bok Choy, Napa, Baby Bok Choy, Pak-choi, Joi Echoi | Bok Choy is open-leaf type, while Michihili and Napa form tighter heads. |
| | | Tolerates more heat than most other brassicas. Harvest lower leaves. |
| | <u>c</u> e | Separate super-sweets from standard varieties by time and distance to avoid cross-pollination. Sucker removal not beneficial. Plant in blocks of 2-3 rows. |
| | Ashley, MarketMore Boston Pickling | Pickling types can also be used fresh. Liberty Hybrid and Sweet Success are burpless types. Many new hybrids are gynoecious (female flowering), which means more fruit set. Bees required for pollination |
| Eggplant Black Beauty, Dusky, Long, Ichiban, | Cloud Nine (white) | May need staking. Harvest into summer. Requires warm weather. |
| Endive/Escarole Ruffec Escarole: Batavian Broadleaf | | Excellent ingredient in tossed salads. Escarole is a selection of endive also known as Batavian endive. |
| Kale Vates Dwarf Blue Curled, Tuscan, Winterbor, Redbor | | There is also a collard variety named Vates. |
| Kohlrabi Early White Vienna, Purple Vienna | | Both red and green varieties are easy to grow. Use fresh or cooked. Leaves are edible. |
| Lettuce Crisphead: Great Lakes Butterhead: Ermosa, Bibb, Tom Thumb, B Loose Leaf: Simpson types, Salad Bowl, R Red Fire Oak Leaf: Salad Bowl, Royal Oak Romaine: Parris Island Cos, Outredgeous | uttercrunch, ed Sails, New | Grow crisphead type in coolest months for firmer heads. Sow seeds very shallow as they need light for germination. Intercrop lettuce with long-season vegetables. |
| Mustard Southern Giant Curled, Florida E Giant Red, Green Wave, Mizuna | 3road Leaf, Tendergreen, | Consider planting in a wide-row system. Broadleaf types require more space. Cook as "greens." Mizuna is a Japanese green used in salads. It is damaged by freezing temperatures. |

| CROP | RECOMMENDED VARIETIES | NOTES/REMARKS |
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| Okra | Clemson Spineless, Emerald, Annie Oakley II, Cajun Delight | Produces well in warm months. Highly susceptible to root-knot nematodes. |
| Onions | Bulbing: Granex (yellow) Bunching (Green): Evergreen Bunching, White Lisbon Bunching Leeks: American Flag Multipliers: Shallots | Plant short-day bulbing varieties. Bulbing onions may be seeded in the fall, then transplanted in Jan-Feb. For bunching onions, insert sets upright for straight stems. Divide and reset multipliers. |
| Peas, English or Snow | Wando, Green Arrow, Sugar Snap, Oregon Sugarpod II | Trellis. The pods of Sugar Snap and Oregon types are edible. |
| Peas, Southern (aka Field Peas, Cow Peas, Crowder Peas, Cream Peas) | California Blackeye No.5, Pinkeye Purple Hull, Texas Cream | Good summer cover crop. Cowpea curculio – a tiny white grub that infests seeds in pod – is a common pest. 'California No.5 Blackeye' is resistant to root-knot nematodes. |
| Peppers | Bell: California Wonder, Red Knight, Big Bertha Other Sweet: Sweet Banana, Giant Marconi, Mariachi, Cubanelle Jalapeno: Early Jalapeno, Jalapeno M Specialty Hot: Cherry Bomb, Hungarian Hot Wax, Big Chile II, Numex, Ancho, Thai, Anaheim Chile, Long Cayenne, Habanero, Caribbean Red Habanero | Mulching especially beneficial. Will often produce into summer. Most small-fruited varieties are hot. Pepper heat is measured in Scoville units. Habaneros average 259,000 Scovilles; Caribbean Reds are a little over 445,000 Scovilles. In comparison, Jalapenos rank 2,500-10,000 Scovilles, depending on the variety. |
| Potato | Red Pontiac, Yukon Gold, Gold Rush | Plant 2-ounce seed pieces with eyes. Do not use "store bought" for seed. Remove tops two weeks before digging to "toughen skin." Varieties planted by seeds produce less than from seed pieces. |
| Potatoes, Sweet | Centennial, Beauregard, Vardaman | Sweet potato weevils are a serious problem. Start with certified-free transplants. Use vine cuttings to prolong season. 'Vardaman' is a bush type for small gardens. |
| Pumpkin | Big Max, Connecticut Field, Prizewinner, Jack Be Little, Jack O Lantern | Bees required for pollination. Foliage diseases and fruit-rot are common. |
| Radish | Cherry Belle, White Icicle, Sparkler, Champion, Daikon | The winter type (Daikon) grows well in Florida, too. Inter-crop fast-growing radishes with slow-growing vegetables to save space. |
| Spinach | Melody, Bloomsdale Longstanding, Tyee, Space | Grow only during the coolest months. New Zealand spinach and Malabar spinach, although not true spinach, grow well during warm months in Florida ² . |
| Squash | Summer: Early Prolific Straightneck, Summer Crookneck, Early White Scallop Winter: Spaghetti, Table King, Table Queen & Table Ace (Acorn), Waltham, Early Butternut (Butternut) Zucchini: Cocozelle, Spineless Beauty, Black Beauty Calabaza | Summer squash are usually bush type; winter squash have vining habit. Both male and female flowers on same plant. Bees required. Common fruit rot/drop caused by fungus and incomplete pollination. Crossing occurs but results not seen unless seeds are saved. Winter types store longest. Calabaza is a heat-resistant, disease-resistant, vining, hard-shelled squash, similar to a butternut or acorn in taste. |
| Strawberry | Chandler, Oso Grande, Sweet Charlie, Selva, Camarosa, Festival | Plant short-day varieties. Grow as an annual crop starting with disease-free plants in the fall. |
| Swiss Chard | Bright Lights, Bright Yellow, Fordhook Giant, Lucullus, Red Ruby | Can be grown nearly year-round in Florida. An excellent alternative green for warm weather. |

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| Tomatoes | Large Fruit: Celebrity, Heat Wave II, Better Boy, Beefmaster, BHN444-Southern Star*, Amelia*, BHN 640* 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 | Large Fruit:Celebrity, Heat Wave II, Better Boy,Staking, mulching beneficial. Flowers self-pollinated. Blossom drop due to too high or tooSmall Fruit:Small Fruit:Sweet 100, Juliet, Red Grape, Sun Gold,Iow temperatures and/or excessive nitrogen fertilization. Serious problems include blossom-end of the problems include blossom-strained wilts, whitefly, and leafminers.Sugar Snack, Sweet Baby Girl*Resistant to TSWV (Tomato Spotted Wilt Virus)Heirloom:Green Zebra, Cherokee Purple, Eva PurpleBall, Brandywine, Mortgage Lifter, Delicious |
| Turnips | Roots: Purple Top White Globe Roots and Greens: Purple Top Greens: Seven Top, Shogoin | Grow for roots and tops (greens). Broadcast seed in wide-row system or single file. |
| Watermelon | Large : Jubilee (aka FL Giant), Crimson Sweet, Charleston Grey 133 Small : Sugar Baby, Mickeylee | Vines require lots of space. Suggest small "ice-box" types. Plant fusarium wilt resistant varieties. Bees required for pollination. "Seedless" types must be interplanted with regular types to dependably bear fruit. |

¹Other varieties may produce well also. Suggestions are based on availability, performance, and pest resistance.
²Information on New Zealand and Malabar spinach and many other minor vegetables can be found at http://edis.ifas.ufl.edu/topic_hs_minor_vegetables