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ome gardening continues to grow in popularity. One of every three families does some type of home gardening, according to conservative estimates, with most gardens located in urban areas. Texas gardeners can produce tasty, nutritious vegetables year-round. To be a successful gardener you will need to follow a few basic rules and make practical decisions.

### **Garden Site**

Although many urban gardeners have little choice, selecting a garden site is extremely important. The ideal garden area gets full or nearly full sunlight and has deep, well-drained, fertile soil. The garden should be near a water outlet but not close to competing shrubs or trees. However, if you modify certain cultural practices and select the right crops, almost any site can become a highly productive garden.

### **Crop Selection**

One of the first things you must do is decide what vegetables to grow. Table 1 lists crops suitable for small and large gardens. You will want to grow vegetables that return a good portion of nutritious food for the time and space they require. Vine crops such as watermelons, cantaloupes, winter squash and cucumbers need large amounts of space, but if you plant them near a fence or trellis you may need less space for vine crops. Plant the vegetables your family will enjoy most. Resist the urge to plant more of any particular vegetable than you need unless you plan to preserve the surplus.

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Table 1. Home garden vegetables.						
Small g	ardens	Large gardens				
Beets	Green bean	Cantaloupe	Potato			
Broccoli	Lettuce	Cauliflower	Pumpkin			
Bush squash	Onion	Collard	Southern pea			
Cabbage	Parsley	Cucumber	Sweet corn			
Carrot	Pepper	Mustard	Sweet potato			
Eggplant	Radish	Okra	Watermelon			
English pea	Spinach					
Garlic	Tomato					

It is important to select the right variety of each vegetable. If you plant the wrong variety for your area you may not get a satisfactory yield no matter how much care you give the plants. Your county Extension agent can provide a list of varieties that are well adapted to your area of Texas. If you try new varieties and hybrids, limit the size of the plantings.

If your garden does not receive full or nearly full sunlight, try growing leafy crops such as leaf lettuce, mustard and parsley. Table 2 lists vegetables that do well in full sunlight and those that tolerate partial shade.

Table 2. Light requirements of common vegetables.					
Require bright sunli	ght				
Bean	Eggplant	Potato			
Broccoli	Okra Pumpkin				
Cantaloupe	Onion	Squash			
Cauliflower	Pea Tomato				
Cucumber	Cucumber Pepper Watermelon				
Tolerate partial sha	de				
Beet	Collard	Parsley			
Brussels sprouts	Kale	Radish			
Cabbage	Lettuce Spinach				
Carrot	Mustard	Turnip			

#### **Garden Plan**

A gardener needs a plan just as an architect does. Careful planning lessens gardening work and increases the return on your labor.

Table 3 shows the relative maturity rates of various vegetable crops. Long-term crops require a long growing period. Plant them where they won't interfere with the care and harvesting of short-term crops. Plant tall-growing crops (okra, staked tomatoes, pole beans, sweet corn) on the north side of the garden where they will not shade or interfere with the growth of low-growing crops such as radishes, leaf lettuce, onions and bush beans. Group crops according to their rate of maturity so a new crop can be planted to take the place of another as soon as it is removed. When you plant a new crop, it should be totally unrelated to the crop it is replacing. This is called crop rotation. Crop rotation helps prevent the buildup of diseases and insects. For example, follow early beans with beets, squash or bell peppers.

Table 3. Maturity rates of common vegetables.						
Quick (30 to 60 days	3)					
Beets	Mustard	Summer squash				
Bush bean	Radish Turnip					
Leaf lettuce	Spinach Turnip green					
Moderate (60 to 80 days)						
Broccoli	Green onion	Parsley				
Chinese cabbage	Kohlrabi Pepper					
Carrot	Lima bean	Tomato				
Cucumber	Okra					
Slow (80 days or mo	re)					
Brussels sprouts	Cauliflower	Pumpkin				
Bulb onion	Eggplant Sweet potato					
Cabbage	Garlic Tomato					
Cantaloupe	Irish potato	Watermelon				

#### **Soil Preparation**

Many garden sites do not have the deep, well-drained, fertile soil that is ideal for growing vegetables. If yours is one of them, you will need to alter the soil to provide good drainage and aeration. If the soil is heavy clay, adding organic matter, sand or gypsum will improve it. Organic matter also improves sandy soils.

To improve clay soils, apply 1 to 2 inches of good sand and 2 to 3 inches of organic matter to the soil surface in late winter or early spring; then turn it under to mix it thoroughly with the soil. It may take several years to improve the soil's physical condition and you'll want to add more organic matter (in the form of composted materials, peanut hulls, rice hulls, grass clippings, etc.) periodically. Turn the soil to a depth of 8 to 10 inches—the deeper the better—each time you add organic matter. Add gypsum at the rate of 6 to 8 pounds per 100 square feet where the soil is heavy clay.

When you add organic matter or sand to the garden site, be careful not to introduce soil pests such as nematodes. Contact your county Extension agent to find out how you can have your soil tested for nematodes by the Texas AgriLife Extension Soil Testing Laboratory.

Never work wet garden soil. To determine if the soil is dry enough for working, squeeze together a small handful of soil. If it sticks together in a ball and does not readily crumble under slight pressure by your thumb and finger, it is too wet for working.

Seeds germinate better in well-prepared soil than in coarse, lumpy soil. Thorough soil preparation makes planting and caring for your crops much easier. It is possible, however, to overdo the preparation of some soils. An ideal soil for planting is granular, not powdery fine.

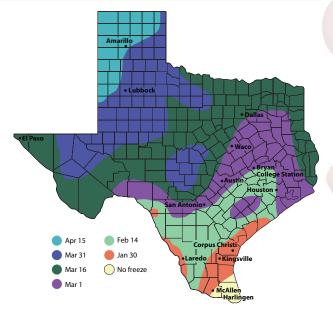


Figure 1. Average date of last spring frost.

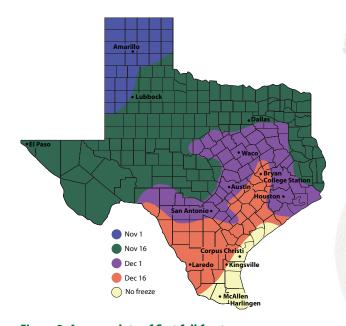


Figure 2. Average date of first fall frost.

#### **Fertilization**

Proper fertilization is another important key to successful vegetable gardening. The amount of fertilizer needed depends upon the soil type and the crops you are growing. Texas soils vary from deep sands to fertile, well-drained soils to heavy, dark clays underlaid by layers of caliche rock or hardpan. Crops grown on sandy soils usually respond to liberal amounts of potassium, whereas crops grown on clay soils do not.

Heavy clay soils can be fertilized much more heavily at planting than can sandy soils. Heavy clay soils and those with lots of organic matter can safely absorb and store fertilizer at three to four times the rate of sandy soils. Thin, sandy soils, which need fertilizer the most, unfortunately cannot be fed as heavily without burning plants. The solution is to feed poor, thin soils more often in lighter doses. For accurate recommendations regarding fertilizer rates, contact your county Extension agent and request a soil test kit.

In general, if your garden is located on deep, sandy soil, apply a complete preplant fertilizer such as 5-10-10 or 6-12-12 at the rate of 1 to 2 pounds per 100 square feet. If your soil has a high percentage of clay, a fertilizer such as 10-20-10 or 12-24-12 applied at 1 to 2 pounds per 100 square feet should be suitable.

Make the preplant fertilizer application a few days before planting. Spade the garden plot,

spread the fertilizer by hand or with a fertilizer distributor, and then work the soil well to properly mix the fertilizer with the soil. After the fertilizer is well mixed with the soil, bed the garden in preparation for planting.

On alkaline soils, apply 1-20-0 (superphosphate) directly beneath the intended seed row or plant row before planting. Apply the superphosphate at a rate of 1 to 1½ pounds per 100 linear feet of row. Make sure the nitrogen material will be 2 to 4 inches below the seed or transplant roots so it won't harm them. Later in the season you can apply additional nitrogen as a furrow or sidedress application. For most soils, 2 to 3 pounds of 21-0-0 (ammonium sulfate) per 100 linear feet of row, applied in the furrow and watered in, is adequate. For crops such as tomatoes, peppers and squash, make this application at first fruit set. Sidedress leafy crops such as cabbage and lettuce when they develop several sets of character leaves.

### **Planting**

Plant your garden as early as possible in the spring and fall so the vegetables will grow and mature during ideal conditions. Using transplants rather than seeds, when possible, allows crops to mature earlier and extends the productive period of many vegetable crops. Be careful not to plant transplants too deep or too shallow, especially if plants are in containers such as peat pots. Planting too deep often causes developed roots to abort. Planting too shallow may cause roots to dry out.

Some crops can be removed from containers for planting, while others are best transplanted in containers, as indicated in Table 4. When transplanting plants such as tomatoes or peppers, use a starter solution. Purchase starter solution at a nursery or make your own by mixing 2 to 3 cups of fertilizer (such as 10-20-10) in 5 gallons of water. Use the lower rate on light, sandy soils. Pour 1 to 2 pints of starter solution (depending on plant size) into each transplant hole before planting.

This keeps the plants from drying out and gives the young, growing plants the nutrients they need.

When planting seeds, a general rule of thumb is to cover the seed two to three times as deep

Table 4. Ease of tra	nsplanting.					
Easily transplanted	l					
Beet	et Cauliflower					
Broccoli	Chard Tomato					
Cabbage Lettuce						
Require care						
Carrot	Eggplant	Pepper				
Celery	Okra	Spinach				
Very difficult withou	out using containers					
Bean	Cucumber	Turnip				
Cantaloupe	Pea	Watermelon				
Sweet corn	Squash					

as its width. This is especially true for big seeds such as green bean, sweet corn, cucumber, cantaloupe and watermelon. Smaller seeds such as carrot, lettuce or onion can be planted about ¼ to ½ inch deep. Plant seeds fairly thickly; once they have sprouted you can thin plants to an optimum stand. After planting seeds, do not let the soil become so dry that it develops a crust, but do not overwater either. Table 5 indicates the average number of days from planting to emergence.

growing c	onditions	i.			
Bean	5-10	Cucumber	6-10	Pepper	9-14
Beet	7-10	Eggplant	6-10	Radish	3-6
Broccoli	5-10	Lettuce	6-8	Spinach	7-12
Cabbage	5-10	Okra	7-10	Squash	4-6
Carrot	12-18	Onion	7-10	Tomato	6-12

6 - 10

15-21

Turnip

Watermelon 6-8

4-8

Cauliflower

Corn

5-10

5-8

Pea

**Parsley** 

Table 5. Days from planting to emergence under good

#### **Watering**

Apply enough water to wet the soil to a depth of at least 6 inches. For best production, most gardens require about 1 inch of rain or irrigation per week during the growing season. Light, sandy soils usually need to be watered more often than heavier, dark soils. If you use sprinklers, water in the morning so plant foliage

has time to dry before night. This helps prevent foliage diseases, since humidity and cool temperatures encourage disease development on most vegetable crops.

A drip irrigation system is best because it keeps water off plant foliage and uses water most efficiently. Drip irrigation is ideal for use with mulches.

#### **Weed Control**

A long-handled hoe is the best tool for controlling undesirable plants in vegetable gardens. Chemical weed control usually is undesirable and unsatisfactory because of the selective nature of weed control chemicals. The wide variety of vegetable crops normally planted in a small area

prohibits the use of such chemicals. Cultivate and hoe shallowly to avoid injuring vegetable roots near the soil surface. Control weeds when they are small seedlings to prevent them from seeding and re-inoculating the garden area. Mulching is also an effective means of weed control.

### **Mulching**

Mulching increases yields, conserves moisture, prevents weed growth, regulates soil temperature, and lessens crop loss caused by ground rot. Organic mulches include straw, leaves, grass, bark, compost, sawdust and peat moss. Organic mulches incorporated into the soil will improve the soil tilth, aeration and drainage. The amount of organic mulch to use depends upon the type,

but 1 to 2 inches applied to the garden surface around growing plants is adequate.

When you have finished harvesting and it is time to turn under organic mulch for subsequent crops, add more fertilizer at the rate of about 1 pound per 100 square feet to help soil organisms break down the additional organic matter.

#### **Pest Control**

Diseases and insects can cause problems for Texas gardeners. Long growing seasons with relatively mild winters encourage large insect populations. Avoid spraying when possible, but use recommended and approved chemicals if the situation warrants. Be careful when deciding which chemicals to apply. Spray only those crops listed on the chemical's container. When used according to the manufacturer's directions and label, chemicals pose no threat to the home gardener.

Disease control is really a preventive rather than an eradication procedure. Cool, damp conditions are conducive to foliage diseases. Carefully watch your garden for symptoms of diseases. If necessary, spray with approved fungicides. Publications on disease and insect identification and control are available from your county Extension office and at the Texas AgriLife Extension Bookstore (http://agrilifebookstore.org).

### **Harvesting**

Harvest time brings the reward of planting and caring for your vegetable crops. For best flavor, harvest vegetables when they are mature. A vegetable's full flavor develops only at peak maturity, result-

ing in the excellent taste of vine-ripened tomatoes, tender green beans and crisp, flavorful lettuce. For maximum flavor and nutritional content, harvest the crop the day it is to be canned, frozen or eaten.

### **Home Gardening Do's and Don'ts**

- **Do** 1. Use recommended varieties for your area of the state.
  - 2. Sample soil and have it tested every 2 to 3 years.
  - 3. Apply preplant fertilizer to the garden in the recommended amount.
  - 4. Examine your garden often to keep ahead of potential problems.
  - 5. Keep the garden free of insects, diseases and weeds.
  - 6. Use mulches to conserve moisture, control weeds and reduce ground rots.
  - 7. Water as needed, wetting soil to a depth of 6 inches.
  - 8. Thin when plants are small.
  - Avoid excessive walking and working in the garden when the foliage and soil are wet.
  - 10. Wash your garden tools and sprayer well after each use.
  - 11. Keep records on garden activities.

#### Don't

- 1. Depend on varieties not recommended for your area, but do try limited amounts of new releases.
- 2. Plant so closely that you cannot walk or work in the garden.
- 3. Cultivate so deeply that plant roots are injured.
- 4. Shade small plants with taller growing crops.
- 5. Water excessively or in late afternoon.
- 6. Place fertilizer directly in contact with plant roots or seeds.
- 7. Allow weeds to grow large before cultivating.
- 8. Apply chemicals or pesticides in a haphazard manner or without reading the label directions.
- 9. Use chemicals not specifically recommended for garden crops.
- 10. Store leftover diluted spray.

Table 6. Handy conversion table.					
3 teaspoons = 1 tablespoon	2 pints = 1 quart				
2 tablespoons = 1 fluid ounce	4 quarts = 1 gallon				
16 tablespoons = 1 cup	1 ounce = approximately 2 tablespoons (dry weight)				
2 cups = 1 pint or 16 fluid ounces					

Table 7. Common garden problems.						
Symptom	Possible causes	Corrective measure(s)				
Plants stunted in growth; sickly, yellow color	Not enough soil nutrients or soil pH is abnormal	Use fertilizer and correct pH according to a soil test. Use 2 to 3 pounds of complete fertilizer per 100 square feet in the absence of soil test.				
	Plants growing in compacted, poorly drained soil	Modify soil with organic matter or coarse sand.				
	Insect or disease damage	Use a regular spray or dust program.				
	Iron deficiency	Apply iron to soil or foliage.				
Plants stunted in growth; sickly, purplish color	Low temperature	Plant at the proper time. Don't use light-colored mulch too early in the season.				
	Low available phosphate	Apply sufficient phosphate at planting.				
Holes in leaves; leaves yellowish and dropping, or distorted in shape	Insect damage	Use recommended insecticides at regula intervals.				
Plant leaves with spots; dead, dried areas; or powdery or rusty areas	Plant disease	Use resistant varieties; remove diseased plants and use a regular spray program.				
Plants wilt even though they have sufficient water	Soluble salts too high or root system damage	Have soil tested. Use soil insecticides, fungicides and resistant varieties.				
	Poor drainage and aeration	Add organic matter or sand to the soil.				
	Insect or nematode damage	Use recommended varieties and apply soil insecticides or nematicides.				
Plants tall, spindly and unproductive	Excessive shade	Relocate to a sunny area. Keep down weeds.				
	Excessive nitrogen	Reduce applications of nitrogen				
Blossom drop (tomato)	Hot, dry periods	Use mulch and water. Plant heat-tolerant varieties.				
	Minor element deficiencies	Use fertilizer containing zinc, iron and manganese.				
Failure to set fruit (vine crop)	Poor pollination	Avoid spraying when bees are present.				
Leathery, dry, brown blemish on the blossom end of tomato, pepper and watermelon	Blossom end rot	Keep the soil moisture uniform. Avoid overwatering and excessive nitrogen.				

Vegetables	Seed or plants per 100 feet	Depth of planting (in)	Distance between rows (in)	Distance between plants (in)	Height of crop (ft)	Spring planting relative to frost-free date	Fall planting relative to first freeze date
Asparagus	1 oz seed or 66 plants	1-1½ or 6-8	36-48	18	5	4 to 6 weeks before	not recommended
Beans, snap bush	½ lb seed	1-1½	30-36	3-4	1½	1 to 4 weeks after	8 to 10 weeks before
Beans, snap pole	½ lb seed	1-1½	36-48	4-6	6	1 to 4 weeks after	14 to 16 weeks before
Beans, Lima bush	½ lb seed	1-1½	30-36	3-4	1½	1 to 4 weeks after	8 to 10 weeks before
Beans, Lima pole	1/4 lb seed	1-1½	36-48	12-18	6	1 to 4 weeks after	14 to 16 weeks before
Beets	1 oz seed	1	14-24	2	1½	4 to 6 weeks before	8 to 10 weeks before
Broccoli	¼ oz seed	1/2	24-36	14-24	3	4 to 6 weeks before	10 to 16 weeks before
Brussels Sprouts	1/4 oz seed	1/2	24-36	14-24	2	4 to 6 weeks before	10 to 14 weeks before
Cabbage	1/4 oz seed	1/2	24-36	14-24	1½	4 to 6 weeks before	10 to 16 weeks before
Cabbage, Chinese	¼ oz seed	1/2	18-30	7-12	11/2	4 to 6 weeks before	12 to 14 weeks before
Carrot	½ oz seed	1/2	14-24	2	1	4 to 6 weeks before	12 to 14 weeks before
Cauliflower	¼ oz seed	1/2	24-36	14-24	3	not recommended	10 to 16 weeks before
Chard, Swiss	2 oz seed	1	18-30	6	1½	2 to 6 weeks before	12 to 16 weeks before
Collard (Kale)	¼ oz seed	1/2	18-36	6-12	2	2 to 6 weeks before	8 to 12 weeks before
Corn, sweet	3-4 oz seed	1/2	24-36	9-12	6	1 to 6 weeks after	12 to 14 weeks before
Cucumber	½ oz seed	1/2	48-72	8-12	1	1 to 6 weeks after	10 to 12 weeks before
Eggplant	1/8 oz seed	1/2	30-26	18-24	3	2 to 6 weeks after	12 to 16 weeks before
Garlic	1 lb seed	1/2	14-24	2-4	1	not recommended	4 to 6 weeks before
Kohlrabi	1/4 oz seed	1/2	14-24	4-6	1½	2 to 6 weeks before	12 to 16 weeks before
Lettuce	1/4 oz seed	1/2	18-24	2-3	1	6 weeks before or 2 weeks after	10 to 14 weeks before
Muskmelon (Cantaloupe)	½ oz seed	1	60-96	24-36	1	1 to 6 weeks after	14 to 16 weeks before

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Table 8. Vegetal			Distance of	D'atau a	Hallaha af	Ci	Fall of and an
Vegetables	Seed or plants per 100 feet	Depth of planting (in)	Distance between rows (in)	Distance between plants (in)	Height of crop (ft)	Spring planting relative to frost-free date	Fall planting relative to first freeze date
Mustard	¼ oz seed	1/2	14-24	6-12	1½	1 to 6 weeks after	10 to 16 weeks before
Okra	2 oz seed	1	36-42	12-24	6	2 to 6 weeks after	12 to 16 weeks before
Onion (plants)	No seed/ 400-600 plants	1/2	14-24	2-3	1½	4 to 10 weeks before	not recommended
Onion (seed)	1 oz seed	1/2	14-24	2-3	1½	6 to 8 weeks before	8 to 10 weeks before
Parsley	1/4 oz seed	1/8	14-24	2-4	1/2	1 to 6 weeks before	6 to 16 weeks before
Peas, English	1 lb seed	2-3	18-36	1	2	2 to 8 weeks before	2 to 12 weeks before
Peas, Southern	½ lb seed	2-3	24-36	4-6	2½	2 to 10 weeks after	10-12 weeks before
Pepper	1/8 oz seed	1/2	30-36	18-24	3	1 to 8 weeks after	12 to 16 weeks before
Potato, Irish	6-10 lb seed	4	30-36	10-15	2	4 to 6 weeks before	14 to 16 weeks before
Potato, sweet	No seed/ 75-100 plants	3-5	36-48	12-16	1	2 to 8 weeks after	not recommended
Pumpkin	½ oz seed	1/2	60-96	36-48	1	1 to 4 weeks after	12 to 14 weeks before
Radish	1 oz seed	1/2	14-24	1	1/2	6 weeks before/ 4 weeks after	1 to 8 weeks before
Spinach	1 oz seed	1/2	14-24	3-4	1	1 to 8 weeks before	2 to 16 weeks before
Squash, summer	1 oz seed	1/2	36-60	18-36	3	1 to 4 weeks after	12 to 15 weeks before
Squash, winter	½ oz seed	1/2	60-96	24-48	1	1 to 4 weeks after	12 to 14 weeks before
Tomato	1/8 oz seed or 50 plants	½ or 4-6	36-48	36-48	3	1 to 8 weeks after	12 to 14 weeks before
Turnip, greens	½ oz seed	1/2	14-24	2-3	1½	2 to 6 weeks before	2 to 12 weeks before
Turnip, roots	½ oz seed	1/2	14-24	2-3	1½	2 to 6 weeks before	2 to 12 weeks before
Watermelon	1 oz seed	1/2	72-96	36-72	1	1 to 6 weeks after	14 to 16 weeks before

Vegetable	Days to	Length	Yield/100 ft	Approximate	e planting/person
	harvest	of harvest		Fresh	Canned/frozen
Asparagus	730	60	30 lb	10-15 plants	10-15 plants
Beans, snap—bush	45-60	14	120 lb	15-16 ft	15-20 ft
Beans, snap—pole	60-70	30	150 lb	5-6 ft	8-10 ft
Beans, Lima—bush	65-80	14	25 lb shelled	10-15 ft	15-20 ft
Beans, Lima—pole	75-85	40	50 lb shelled	5-6 ft	8-10 ft
Beet	50-60	30	150 lb	5-10 ft	10-20 ft
Broccoli	60-80	40	100 lb	3-5 plants	5-6 plants
Brussels Sprouts	90-100	21	75 lb	2-5 plants	5-8 plants
Cabbage	60-90	40	150 lb	3-4 plants	5-10 plants
Cabbage, Chinese	65-70	21	80 heads	3-10 ft	N/A
Carrot	70-80	21	100 lb	5-10 ft	10-15 ft
Cauliflower	70-90	14	100 lb	3-5 plants	8-12 plants
Chard, Swiss	45-55	40	75 lb	3-5 plants	8-12 plants
Collard (Kale)	50-80	60	100 lb	5-10 ft	5-10 ft
Corn, sweet	70-90	10	10 dozen	10-15 ft	30-50 ft
Cucumber	50-70	30	120 lb	1-2 hills	3-5 hills
Eggplant	80-90	90	100 lb	2-3 plants	2-3 plants
Garlic	140-150	N/A	40 lb	N/A	1-5 ft
Kohlrabi	55-75	14	75 lb	3-5 ft	5-10 ft
Lettuce	40-80	21	50 lb	5-15 ft	N/A
Muskmelon/ Cantaloupe	85-100	30	100 fruits	3-5 hills	N/A
Mustard	30-40	30	100 lb	5-10 ft	10-15 ft
0kra	55-65	90	100 lb	4-6 ft	6-10 ft
Onion (bulb)	80-120	N/A	100 lb	3-5 ft	30-50 ft
Onion (seed)	90-120	N/A	100 lb	3-5 ft	30-50 ft
Parsley	70-90	90	30 lb	1-3 ft	1-3 ft
Pea, English	55-90	7	20 lb	15-20 ft	40-60 ft
Pea, Southern	60-70	30	40 lb	10-15 ft	20-50 ft
Pepper	60-90	90	60 lb	3-5 plants	3-5 plants
Potato, Irish	75-100	N/A	100 lb	50-100 ft	N/A
Potato, sweet	100-130	N/A	100 lb	5-10 plants	10-20 plants
Pumpkin	75-100	N/A	100 lb	1-2 hills	1-2 hills
Radish	25-40	N/A	100 bunches	3-5 ft	N/A
Spinach	40-60	40	3 bushels	5-10 ft	10-15 ft

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Table 9. Vegetable harvest and yield.							
Vegetable	Days to	Length	Yield/100 ft	Approximate planting/person			
	harvest	rvest of harvest	Fresh	Canned/frozen			
Squash, summer	50-60	40	150 lb	2-3 hills	2-3 hills		
Squash, winter	85-100	N/A	100 lb	1-3 hills	1-3 hills		
Tomato	70-90	40	100 lb	3-5 plants	5-10 plants		
Turnip, greens	30	40	50-100 lb	5-10 ft	N/A		
Turnip, roots	30-60	30	50-100 lb	5-10 ft	5-10 ft		
Watermelon	80-100	30	40 fruits	2-4 hills	N/A		

This publication was revised from earlier versions authored by Sam Cotner and Frank J. Dainello, Professors Emeritus and former Extension Horticulturists.

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leon.agrilife.org

Artic	hoke	<u>Sh</u>	ell	Variety	Days to Harvest
Variety	Days to Harvest	Dwarf Horticultural	60	Imperator 58	75
Green Globe	150	Ве	et	Nantes Half Long	70
Aspai	ragus	Variety	Days to Harvest	Red Core Chantenay	70
Variety	Days to Harvest	Chioggia	54	<u>Ba</u>	by
Jersey Gem	300	Detroit Dark Red	56	Little Finger	60
Jersey Giant	300	Pacemaker II	50	Nelson	60
UC-157	300	Red Ace	53	Thumbelina	55
UC-72	300	Ruby Queen	55	<u>Proce</u>	ssing
Ве	an	Brod	coli	Danver 126	75
Variety	Days to Harvest	Variety	Days to Harvest	Caulif	lower
Bu	<u>sh</u>	Calabrese	48	Variety	Days to Harvest
Blue Lake	60	Green Comet	40	Imperial	60
Derby	57	Packman	50	Snow Crown	60
Early Contender	55	Premium Crop	55	Snowball Y Improved	60
Florence	60	Southern Comet	50	Celery	
Greencrop	50	Brussels Sprouts		Variety	Days to Harvest
Jade	60	Variety	Days to Harvest	Florida 683	100
Provider	50	Jade Cross	80	Summer or Giant Pascal	125
Roma II	60	Cabl	page	Utah 52-70	120
Strike	55	Variety	Days to Harvest	Chives	
Tendercrop	54	Bravo	85	Variety	Days to Harvest
Topcrop	50	Early Jersey Wakefield	53	Chinese Chives	80
Yellow Wax Bean: Rocdor	53	Golden Acre	65	Garlic Chives	80
<u>Lir</u>	<u>na</u>	Market Prize	76	Colla	ards
Dixie White	70	Rio Verde	85	Variety	Days to Harvest
Fordhook	75	Ruby Ball	78	Blue Max	68
Henderson Bush	65	Savoy Express	55	Georgia Southern	75
Jackson Wonder Bush	son Wonder Bush 65		<u>iese</u>	Vates	75
<u>Pinto</u>		Jade Pagoda	65	Co	rn
UI 114	85	Michihili	80	Variety	Days to Harvest
Po	<u>ole</u>	Monument	85	<u>Ind</u>	ian
Landfrauen	60	Napa	65	Rainbow	110
McCaslan	60	Two Seasons	62	Pope	corn
Northeaster	56	Car	rot	Robust Yellow	100



Strawberry	110	Pingtung long	65	Butterhe	ad/Bibb		
White Cloud	90	Tycoon	54	Bronze Mignonette	55		
se: Sugary Enhanced		Gai	rlic	Buttercrunch	70		
Kandy Korn (Yellow)	89	Variety	Days to Harvest	Ermosa	48		
sh2: shrunken, supersweet, extra sweet		Elephant	120	Crisphea	d/Iceberg		
How Sweet It Is (White)	87	Mexican Purple	120	Mission	75		
Mirai	70	Greens, S	Specialty	Prizehead	50		
Summer Sweet	81	Variety Days to Harvest		<u>Looseleaf</u>			
<u>su: Norm</u>	al Sugary	Cool Season		Black Seeded Simpson	eded Simpson 45		
Merit (Yellow)	75	Arugula	25	Lolla Rossa	53		
Silver Queen (White)	91	Corn Salad or Mache	25	Oakleaf	50		
Sweet G-90 (Bicolor)	90	Curly Endive	50	Red Sails	52		
Cucu	mber	Frisee Lettuce	50	Ruby Red	50		
Variety	Days to Harvest	Joi Choi	50	Salad Bowl (green)	49		
<u>Pick</u>	ling	Mei Qing Choi	50	Tango	45		
Calypso	52	Radicchio	85	Rom	aine		
Carolina	49	Tatsoi	35	Parris Island	75		
H-19 Little Leaf	55	Warm S	Warm Season Valmaine		80		
Slicing		Malabar Spinach	70	Winter Density	54		
Ashley	65	Molokhia	60	Me	on		
Burpless	55	New Zealand Spinach	70	Variety	Days to Harvest		
Dasher II	60	Vegetable Amaranth	50	<u>Canta</u>	<u>loupe</u>		
Poinsett 76	60	Ka	ile	Ambrosia	86		
Straight Eight	60	Variety	Days to Harvest	Caravelle	80		
Suyo	61	Dwarf Blue Curled Scotch	55	Hales Best	82		
Sweet Slice	62	Dwarf Blue Curled Vates	55	Magnum 45	80		
Sweet Success	55	Red Russian (Heirloom)	50	Mainstream	90		
D	ill	Toscano Lacinato	62 Mission		80		
Variety	Days to Harvest	Kohl	Irabi	Perlita	85		
Bouquet	60	Variety	Days to Harvest	TAM Uvalde	85		
Eggplant		Early Purple Vienna 55		Mustard			
Variety	Days to Harvest	Early White Vienna	55	Variety	Days to Harvest		
Black Beauty	80	Grand Duke	45	Early Mizuna	45		
Blacknite	61	Le	ek	Florida Broadleaf	40		
Florida Hibush	85	Variety	Days to Harvest	Green Wave	45		
Florida Market	85	American Flag	130	Large Smooth Leaf	49		
Megal	60	King Richard	80	Osaka Purple	45		
Neon	65	Titan	110	Tendergreen	40		
<u>Oriental</u>		Lett	uce	Okra			
				Variety	Days to Harvest		



Baby Bubba	53	Oregon Giant	65	Red LaSoda	100	
Cajun Delight	49	Pink Eye Purple Hull	65	Russian Banana (Fingerling)	90	
Clemson Spineless	55	Texas Cream 8	75	Pum	pkin	
Cowhorn	60	Texas Pinkeye	60	Variety	Days to Harvest	
Emerald	58	Zipper Cream	75	Lai	<u>rge</u>	
Lee	50	Pep	per	Big Max	120	
Louisiana Green Velvet	55	Variety	Days to Harvest	Connecticut Field	120	
On	ion	<u>H</u>	<u>ot</u>	Med	<u>lium</u>	
Variety	Days to Harvest	Anaheim (Chile)	75	Howden	105	
<u>Bı</u>	<u>dlr</u>	Cayenne 70		Jack O'Lantern	110	
Armado (Long Day)	125	Habanero	100	<u>S</u> m	<u>nall</u>	
Cimarron (Intermediate Day)	110	Hidalgo Serrano	85	Baby Bear	90	
Durango (Long Day)	125	Hungarian Yellow Wax	70	Jack Be Little	95	
Early Grano 502 (YWR, Short Day)	80	Jalapeno 70 Small Sugar		Small Sugar	95	
Granex (YWR, Short Day)	100	Mexibell	75	Rac	lish	
Red Burgandy (Short Day)	110	Mucho Nacho Jalapeno	75	Variety	Days to Harvest	
Yellow TX Supersweet 1015 (Short Day)	110	Numex Joe E. Parker	75	Cherry Belle	22	
<u>Bund</u>	<u>ching</u>	Rio Grande 66 (Bell)	85	Early Scarlet Globe	24	
Evergreen Long White	Evergreen Long White 65		70	Long White Oriental	45	
Parlsey		Tampico	85	Sparkler	25	
Variety	Days to Harvest	Vera Cruz Jalapeno	65	White Icicle	30	
Banquet	00	<u>Sweet</u>		D-:	l	
L 1. *.	80	<u>5w</u>	<u>eet</u>	<u>Dai</u>	<u>kon</u>	
Moss Curled	70	Sw Banana Supreme	<u>eet</u> 65	Misato Rose Red Meat	<u>kon</u> 60	
Moss Curled						
Moss Curled	70	Banana Supreme	65	Misato Rose Red Meat	60 65	
Moss Curled Pars	70 <b>sley</b>	Banana Supreme Bell Tower (Bell)	65 70	Misato Rose Red Meat Myashige	60 65 nach	
Moss Curled Pars Variety	70 Sley Days to Harvest	Banana Supreme Bell Tower (Bell) Big Bertha (Bell, Green)	65 70 70	Misato Rose Red Meat Myashige Spir	60 65 <b>nach</b>	
Moss Curled  Pars  Variety  Champion Moss Curled  Italian Flat Leaf	70  Sley  Days to Harvest 80	Banana Supreme Bell Tower (Bell) Big Bertha (Bell, Green) Calwonder (Bell)	65 70 70 75	Misato Rose Red Meat Myashige Spir Variety	60 65 nach Days to Harvest	
Moss Curled  Pars  Variety  Champion Moss Curled  Italian Flat Leaf	70  Sley  Days to Harvest  80  75	Banana Supreme Bell Tower (Bell) Big Bertha (Bell, Green) Calwonder (Bell) Jupiter (Bell, Red) Keystone Giant (Bell)	65 70 70 75 75	Misato Rose Red Meat Myashige Spir Variety Bloomsdale	60 65 <b>nach</b> <b>Days to Harvest</b> 45 42	
Moss Curled  Pars  Variety  Champion Moss Curled  Italian Flat Leaf  Po  Variety	70 sley Days to Harvest 80 75	Banana Supreme Bell Tower (Bell) Big Bertha (Bell, Green) Calwonder (Bell) Jupiter (Bell, Red) Keystone Giant (Bell)	65 70 70 75 75 78	Misato Rose Red Meat Myashige  Spir Variety Bloomsdale Melody	60 65 <b>nach</b> <b>Days to Harvest</b> 45 42	
Moss Curled  Pars  Variety  Champion Moss Curled  Italian Flat Leaf  Po  Variety	70  Sley  Days to Harvest  80  75  ea  Days to Harvest	Banana Supreme Bell Tower (Bell) Big Bertha (Bell, Green) Calwonder (Bell) Jupiter (Bell, Red) Keystone Giant (Bell) Senorita (Mild Jalapeno)	65 70 70 75 75 78 80	Misato Rose Red Meat Myashige Spir Variety Bloomsdale Melody Squ	60 65 nach Days to Harvest 45 42 ash Days to Harvest	
Moss Curled  Pars  Variety  Champion Moss Curled  Italian Flat Leaf  Variety  Eng	70  Sley  Days to Harvest 80 75  ea  Days to Harvest	Banana Supreme Bell Tower (Bell) Big Bertha (Bell, Green) Calwonder (Bell) Jupiter (Bell, Red) Keystone Giant (Bell) Senorita (Mild Jalapeno) Sweet Banana	65 70 70 75 75 78 80 68	Misato Rose Red Meat Myashige Spir Variety Bloomsdale Melody Squ Variety	60 65 nach Days to Harvest 45 42 ash Days to Harvest	
Moss Curled  Pars  Variety  Champion Moss Curled  Italian Flat Leaf  Po  Variety  Eng  Dwarf Gray Sugar	70  Sley  Days to Harvest 80 75  ea  Days to Harvest elish 60	Banana Supreme Bell Tower (Bell) Big Bertha (Bell, Green) Calwonder (Bell) Jupiter (Bell, Red) Keystone Giant (Bell) Senorita (Mild Jalapeno) Sweet Banana Sweet Cherry	65 70 70 75 75 78 80 68 75	Misato Rose Red Meat Myashige  Spir Variety Bloomsdale Melody  Squ Variety  Sum	60 65 nach Days to Harvest 45 42 ash Days to Harvest	
Moss Curled  Pars  Variety  Champion Moss Curled  Italian Flat Leaf  Po  Variety  Eng  Dwarf Gray Sugar  Little Marvel	70  Sley  Days to Harvest 80 75  ea  Days to Harvest slish 60 63	Banana Supreme Bell Tower (Bell) Big Bertha (Bell, Green) Calwonder (Bell) Jupiter (Bell, Red) Keystone Giant (Bell) Senorita (Mild Jalapeno) Sweet Banana Sweet Cherry Sweet Pickle (OYR)	65 70 70 75 75 78 80 68 75 75	Misato Rose Red Meat Myashige  Spir Variety Bloomsdale Melody  Squ Variety  Sum Blondie (Zucchini)	60 65 nach Days to Harvest 45 42 ash Days to Harvest	
Moss Curled  Pars  Variety  Champion Moss Curled  Italian Flat Leaf  Po  Variety  Eng  Dwarf Gray Sugar  Little Marvel  Snow Green	70 sley Days to Harvest 80 75 ea Days to Harvest slish 60 63 59	Banana Supreme Bell Tower (Bell) Big Bertha (Bell, Green) Calwonder (Bell) Jupiter (Bell, Red) Keystone Giant (Bell) Senorita (Mild Jalapeno) Sweet Banana Sweet Cherry Sweet Pickle (OYR) TAM Mild Jalapeno Yolo Wonder (Bell)	65 70 70 75 75 78 80 68 75 75 75	Misato Rose Red Meat Myashige  Spir Variety Bloomsdale Melody  Squ Variety  Sum Blondie (Zucchini) Burpee's Butterstick (Yellow, Straightneck)	60 65 nach  Days to Harvest 45 42 ash  Days to Harvest mer 50 50	
Moss Curled  Pars  Variety Champion Moss Curled Italian Flat Leaf  Po  Variety  Eng  Dwarf Gray Sugar  Little Marvel  Snow Green  Sugar Bon	70  sley  Days to Harvest  80  75  ea  Days to Harvest  slish  60  63  59  55	Banana Supreme Bell Tower (Bell) Big Bertha (Bell, Green) Calwonder (Bell) Jupiter (Bell, Red) Keystone Giant (Bell) Senorita (Mild Jalapeno) Sweet Banana Sweet Cherry Sweet Pickle (OYR) TAM Mild Jalapeno Yolo Wonder (Bell)	65 70 70 75 75 78 80 68 75 75 70 75	Misato Rose Red Meat Myashige  Spir Variety  Bloomsdale Melody  Squ Variety  Sum Blondie (Zucchini)  Burpee's Butterstick (Yellow, Straightneck) Costata Romanesca (Heirloom Zucchini)	60 65 nach  Days to Harvest 45 42 ash  Days to Harvest emer 50 50 52	
Moss Curled  Pars  Variety  Champion Moss Curled  Italian Flat Leaf  Po  Variety  Eng  Dwarf Gray Sugar  Little Marvel  Snow Green  Sugar Bon  Sugar Snap  Wando	70  sley  Days to Harvest  80  75  ea  Days to Harvest  clish  60  63  59  55  72	Banana Supreme Bell Tower (Bell) Big Bertha (Bell, Green) Calwonder (Bell) Jupiter (Bell, Red) Keystone Giant (Bell) Senorita (Mild Jalapeno) Sweet Banana Sweet Cherry Sweet Pickle (OYR) TAM Mild Jalapeno Yolo Wonder (Bell)  Pot	65 70 70 75 75 78 80 68 75 75 70 75	Misato Rose Red Meat Myashige  Spir Variety Bloomsdale Melody  Squ Variety  Blondie (Zucchini) Burpee's Butterstick (Yellow, Straightneck) Costata Romanesca (Heirloom Zucchini) Dixie (Yellow, Cookneck)	60 65 nach  Days to Harvest 45 42 ash  Days to Harvest mer 50 50 52 45	
Moss Curled  Pars  Variety  Champion Moss Curled  Italian Flat Leaf  Po  Variety  Eng  Dwarf Gray Sugar  Little Marvel  Snow Green  Sugar Bon  Sugar Snap  Wando	70  sley  Days to Harvest  80  75  ea  Days to Harvest  slish  60  63  59  55  72  68	Banana Supreme Bell Tower (Bell) Big Bertha (Bell, Green) Calwonder (Bell) Jupiter (Bell, Red) Keystone Giant (Bell) Senorita (Mild Jalapeno) Sweet Banana Sweet Cherry Sweet Pickle (OYR) TAM Mild Jalapeno Yolo Wonder (Bell)  Pot	65 70 70 75 75 78 80 68 75 75 75 77 75 75 70 75 ato Days to Harvest	Misato Rose Red Meat Myashige  Spir Variety Bloomsdale Melody  Squ Variety  Blondie (Zucchini) Burpee's Butterstick (Yellow, Straightneck) Costata Romanesca (Heirloom Zucchini) Dixie (Yellow, Cookneck) Early White Bush (Scallop)	60 65 nach  Days to Harvest 45 42 ash  Days to Harvest mer 50 50 52 45 45	
Moss Curled  Pars  Variety Champion Moss Curled Italian Flat Leaf  Po  Variety  Eng  Dwarf Gray Sugar  Little Marvel Snow Green Sugar Bon Sugar Snap  Wando  Sout	70  sley  Days to Harvest  80  75  ea  Days to Harvest  elish  60  63  59  55  72  68  thern	Banana Supreme Bell Tower (Bell) Big Bertha (Bell, Green) Calwonder (Bell) Jupiter (Bell, Red) Keystone Giant (Bell) Senorita (Mild Jalapeno) Sweet Banana Sweet Cherry Sweet Pickle (OYR) TAM Mild Jalapeno Yolo Wonder (Bell)  Pot Variety Iri	65 70 70 75 75 78 80 68 75 75 77 70 75 70 75 8 80 Days to Harvest	Misato Rose Red Meat Myashige  Spir Variety Bloomsdale Melody  Squ Variety  Blondie (Zucchini) Burpee's Butterstick (Yellow, Straightneck) Costata Romanesca (Heirloom Zucchini) Dixie (Yellow, Cookneck) Early White Bush (Scallop) Early Yellow (Crookneck)	60 65 nach  Days to Harvest 45 42 ash  Days to Harvest mer 50 50 52 45 45 45 42	



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Lemondrop (Yellow, Straightneck)	49	Cuor Di Bue (H, I)	85	Yellow Baby	80	
Magda (Zucchini)	45	Early Big Red (I)	90	Seed	lless	
Multipik (Yellow Straightneck)	50	<u>Medium</u>	4-11 oz	Tiffany	85	
Onyx (Zucchini)	53	Carnival (D)	70	Tri-X 313	85	
Pavo (Crookneck)	49	Celebrity (D)	70			
President (Zucchini)	49	Dona (I)	65			
Senator (Zucchini)	41	Early Girl (I)	52			
Smoothie (Straightneck)	60	First Lady (I)	66			
Supersett (Yellow Straightneck)	50	Floramerica (D)	70			
<u>Wir</u>	<u>nter</u>	Heatwave (D)	68			
Black Forest Kabocha	110	Porter's Pride (Heirloom)	69			
Blue Hubbard	100	<u>Small</u>	<3 oz			
Carnival (Acorn)	85	Baxter's Bush Cherry (D)	65			
Cushaw	110	Cherry Grande (D)	74			
Delicata	100	Fourth of July (I)	49			
Early Butternut	82	Juliet (Grape, I)	60			
Spaghetti Types	100	Small Fry (D)	65			
Sweet Dumpling	100	Sweet 100 (Cherry, I)	65			
Sweet Mama Kabocha	85	Sweet Million (I)	65			
Table Ace (Acorn)	75	Yellow Russian (H,I)	78			
Table Queen (Acorn)	90	Tur	nip			
Tatume	65	Variety	Days to Harvest			
Vegetable Spaghetti Types	100	Royal Globe	45			
Waltham (Butternut)	95	Gre	<u>ens</u>			
Sweet	potato	All Top	35			
Variety	Days to Harvest	Roots &	<u>Greens</u>			
Centennial	150	Purple Top White Globe	50			
Jewel	150	Shogoin	42			
Swiss	Chard	Tokyo Cross	35			
Variety	Days to Harvest	Water	melon			
Bright Lights	55	Variety	Days to Harvest			
Fordhook Giant	50	Allsweet	90			
Lucullus	52	Black Diamond	90			
Rhubarb Red	59	Bush Sugar Baby	75			
Ruby	59	Charleston Gray	85			
Ton	nato	Crimson Sweet	85			
Variety Days to Harvest		Golden Crown	80			
Variety						
,	>12 oz	Jubilee	95			
,		Jubilee Mirage	95 85			

# Brazos County Master Gardener

## Vegetable Planting Guide for Brazos County Bryan/College Station Area average freeze dates: November 28 and March 5



	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	ОСТ	NOV	DEC
Asparagus *		1/15 - 3/15										
Bean, bush				3/10 - 5/5				8/15 -	9/15			
Bean, pole			3/10 - 4	4/10				8/10 - 9/	10			
Beet	1/5	5 - 3/5							9/1 - 10	/20		
Broccoli *		1/20 - 3/5							Ş	9/10 - 11/15		
Brussels Sprouts *	12/20-1/15								9/	12/20		
Cabbage *	1/1	- 3/5								9/1	5 - 12/31	
Cabbage, Chinese		2/1 - 3/1	10						9/1 - 10/15			
Carrot	12/2	0 - 3/5							9/15 - 11/30			12/20
Cauliflower *		2/15	5 - 3/20						9/	20 - 10/31		
Corn, sweet			3	3/5 - 5/5				- 8/20				
Cucumber				3/20	) - 6/15		7/20 -	- 8/15				
Eggplant *				3/25	5 - 6/10		7/10-7/31					
Garlic	1/	/1 - 3/15							8/10 - 10/20			
Greens:												
Chard, Swiss			2/1 - 4/20						8/20 -	- 11/15		
Collard *		2/-	10 - 3/31							10/1 - 10/31		
Kale *		1/20 - 3/10								10/1 - 10/31		
Kohlrabi		1/20 - 3/10								9/20 - 11/ 9/15 - 11/3		
Lettuce, leaf		1/15 - 3/20	)									
Mustard		1/20	0 - 4/15						8/20 -			
Spinach	1/2	20 - 2/20							9/5 - 10/25			
Turnip		1/15	5 - 4/20						8/20	- 11/20		
Melons					4/5 - 6/15		7/15-7/31					
Okra					4/5 - 6/15		7/15-7/31					
Onion, bulb *	1/5 - 2/5											
Onion, green *										10/1 - 10/31		
Pea, Edible Pod		1/25 - 3/5							9/15-9/30			
Pea, English	1/20	0 - 2/20							9/15-9/30			
Pea, Southern					4/5 - 6/15		7/15-7/31					
Pepper *					4/5 - 6/15			8/1 - 9/1	5			
Potato, Irish *		2/5 - 3/	5					8/15-8/31				
Potato, sweet *				4/5 - 9	5/20							
Pumpkin					4/5 - 6/15		7/15-7/31					
Radish			1/25 - 5/5							9/1 - 11/30		
Squash, summer					- 6/15		7/15 -					
Squash, winter				3/15	- 6/15		7/15 - 8	3/10				
Tomato *			3/5 -	4/20				8/1 - 9/1	5			

<sup>\*</sup> Always set bulbs, crowns or transplants

Brazos County Master Gardeners is a program of Texas AgriLife Extension. Extension programs serve people of all ages regardless of socioeconomic level, race, color, sex, religion, disability or national origin.

The Texas A&M University System, U.S. Department of Agriculture and the County Commissioners Courts of Texas cooperating.