



GROWING FRUITING VEGETABLES IN CONTAINERS: TOMATO, PEPPER AND EGGPLANT

If your vegetable gardening is limited by space or access to a good garden site, consider growing vegetables in containers. Container gardening provides the additional advantage of having your fresh vegetables just outside the door for great convenience. A sunny porch, balcony or patio can be used. You can purchase or create your own blend of container growing mix to supply your plants with the nutrition they need. This reduces potential problems associated with infertile garden sites, nematodes and other soil issues.

Let's start with some general information about containers, growing mixes (media) and vegetable varieties.

Containers

- Select a container at least five gallons in size.
- If using a plastic container, select a light color. Dark-colored plastic containers hold excess heat, increasing soil temperature and possibly damaging roots in summer.
- Porous containers, such as clay or terra cotta, will require more frequent watering.
- Make sure containers have drainage holes on the bottom to avoid the possibility of drowning plants.



Growing Mixes

- Quality mixes are free of disease and weed seeds, hold moisture and nutrients, drain well, are lightweight, and have good fertility.
- Most readily available mixes contain composted pine bark blended with peat moss and perlite.
- Mixes containing coir (coconut fiber), peanut shells and rice hulls are also acceptable.
- Avoid mixes high in peat moss. Peat moss tends to compress during the growing season reducing plant root mass.

Vegetable Varieties

- Look for compact varieties, as they lend themselves better to container production.
- Larger varieties will work but will require additional support.

Now, let's grow some fruiting vegetables in containers.

Tomatoes

- Set one plant per container.
- Use compact, container varieties or determinant types. Determinant types will grow to a certain size and stop growing. Indeterminate or vining types will continue to grow and produce fruit all season long. This constant growth is difficult to manage in a container. It is okay to grow a cherry tomato cultivar, but plants need to be pruned.
- Suggested varieties: Bush Early Girl, Patio Princess, Window Box Roma, Tumbler, Super Bush Hybrid, Bushsteak, Sweet Chelsea, Husky Cherry.
- Time to plant: Plant about two to three weeks after the last spring frost. This translates to mid-April in the coastal plains, late April or early May in the Piedmont, and mid-May



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in the mountains. Use transplants if at all possible. It takes four to six weeks for a tomato seed to grow into the size of tomato transplants that you see in garden centers.

- Support your plants. Small, conical shaped cages are sufficient for many compact varieties. Be sure to install the supports when plants are small. Waiting until plants need support makes installation difficult and you may damage the plants during installation.
- Give them water. Tomatoes need about one inch of water per week (68-75 ounces water per day after fruit set). Tomatoes can be quite deep-rooted, so water the containers thoroughly. As summer heat intensifies plants will require more frequent watering. Sometimes you need to water them twice a day. Consistency of watering is just as important as the amount of water. Consistent, regular watering avoids stressing plants. Inconsistent watering can worsen the effects of problems such as Blossom End Rot. To determine if your plants need water, check the potting mix with the tip of your index finger. Insert your finger to the second joint (about 2 inches down). If the tip of your finger is still dry, it is time to water.
- Give them food. Most potting mixes contain a “starter charge” of fertilizer. This starter fertilizer is usually gone after watering two or three times. After that you will need to feed your tomatoes. Prior to flowering, use a water-soluble, balanced fertilizer with a 1-1-1- ratio. Fertilizers such as 5-5-5, 8-8-8, and 10-10-10 are balanced fertilizers with the proper ratio. Slow release fertilizer such as Osmocote 14-14-14 can be an option as well. After fruit set, when the fruit is about the size of a cherry, switch to a high-potassium fertilizer. Potassium enhances fruit color and flavor while improving plant vigor and disease resistance.
- Watch for diseases. Our hot, humid summers present challenges when it comes to controlling fungal diseases. Early blight and leaf-spotting diseases are among the more common fungal problems experienced in our area. Other problems may be bacterial or viral. Sanitizing old containers prior to use can help control the spread of some diseases.



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Contact your local county Extension center for more information on identifying and controlling tomato diseases.

- Prune your plants. Tomato plants produce lateral buds (a small shoot growing between a leaf and the stem the leaf is on) called suckers. Rip off suckers below the first flower cluster. This prevents your plant from growing too crowded and mitigates disease problems.
- Harvest your tomatoes when fully ripe. This allows the plant to divert resources to the remaining, developing fruit. Leaving tomatoes on the plant too long results in degradation of the remaining fruit. Allow fruit to mature to full color for best flavor.

Peppers

- Set one or two plants per container.
- Use three or four wire tomato cages to support your plants. Install early to avoid damaging plants.
- Suggested bell pepper varieties: Bell Captain, Camelot, X3R Camelot, Clovis, Elisa, Enterprise, Gator Bell, Marengo, Mission Bell, Orobelle, Purple Bell, Yolo Wonder, Keystone Resistant Giant, Canape, Red Cherry. Suggested hot pepper varieties: Anaheim, Carolina, Habanero, Jalapeno. Hot peppers are more forgiving than bell peppers when growing.
- The time to plant peppers is similar to the time to plant tomatoes. Using transplants is recommended.
- Water: Peppers require about 1 inch of water each week. Keep the container soil moist but not soggy.
- Feeding your peppers: Most commercial media contains a fertilizer charge that lasts about two weeks. After two weeks, begin fertilizing weekly with a water-soluble fertilizer. Until plants start to flower, you can use a balanced fertilizer with a 1-1-1 ratio (i.e., 20-20-20). Once flowering begins, change over to a high potassium fertilizer. Most tomato fertilizers fit this criterion.



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- Suckering/pruning: Peppers require minimal pruning. Remove suckers up to the first flower cluster. A sucker is a small shoot growing between a leaf and main stem. Old leaves below the first fruit can be removed around the time you harvest the first pepper.
- Pests and diseases: Insect pests include aphids and leaf miners. You can kill aphids with your fingers or use an insecticidal soap. Diseases include phytophthora blight and leaf spot. Peppers can also have blossom end rot early in the season. It is caused by uneven watering and calcium deficiency. Pesticides from garden centers can be used if all directions on the label are followed. Contact your local Cooperative Extension center for more information on controlling pests and diseases.
- Harvesting: Harvest sweet peppers when they reach full size. It is recommended to allow full color development before harvesting, however, peppers can be harvested green if you do not want to wait for full color. Hot peppers can be harvested green or allowed to ripen and change color on the plant. More mature hot pepper fruits are usually spicier. Cut peppers with pruners rather than pulling, to avoid breaking branches.

Eggplant

- Set one plant per container.
- Suggested varieties: Classic, Orient Express, Epic, Sonata, Long Tom, Ichiban, Fairy Tale, Crescent Moon, Bambino, Hansel, Gretel.
- Support for your plants: Use small, two-ring tomato cages for taller varieties. Install early to avoid damaging plants. Compact plants may not need support. As an alternative method, use a small stake and trellis clips to secure plants.
- Time to plant: About five to seven days later than when you plant tomatoes. Use transplants if possible.
- Watering: Keep the container soil moist but not soggy. Check soil moisture daily and add water when top 2 inches of soil is dry to the touch.



- Feeding your eggplants: Most commercial media contains about a two-week fertilizer charge. After that, start fertilizing weekly with a water-soluble fertilizer with a 1:1:1 ratio such as 20-20-20. At flowering, switch to high potassium fertilizer with a 1:1.5:3 ratio such as 9-15-30.
- Suckering/pruning: Prune to three main stems by removing suckers. A sucker is a small shoot growing between a leaf and main stem.
- Pests and diseases: Insect pests include flea beetles, Colorado potato beetle and spider mites. Young plants are very prone to flea beetle damage. The insecticide Sevin can be used to control them. Diseases include blossom end rot and bacterial wilt. Contact your local Cooperative Extension center for more information on controlling pests and diseases.
- Harvesting: Eggplant fruit can be consumed at the immature stage and when it has reached the full size, so harvest at desired size based on your cooking preference or cultivar, or when the skin appears glossy and the flesh feels firm. Fruit is fragile, so handle gently. Some cultivars may taste off if the fruit is harvested too soon.

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