



Vegetable Gardening in Containers

Growing vegetables in containers is an easy way to experience the flavor and freshness of home-grown vegetables. Vegetable gardening in containers can also beautify your home. The simple pleasure of biting into a tomato freshly picked from the patio, and eaten on the spot, is unbeatable. Growing and harvesting basil in the middle of winter is well worth the effort. You can grow just about any vegetable in a container garden, and you can also save money by doing so.

If you already have a garden, containers can still help you overcome problems like poorly drained soil and soil-borne diseases. Also, containers can be started indoors early in the spring, and then moved outside when the weather cooperates, so you can get a tomato or pepper off to a faster start. Even if you live in an apartment, or have limited garden space, you can still successfully grow many vegetables in pots. A window sill, patio, balcony, or doorstep can provide sufficient space for a productive container garden.



Containers. To grow vegetables in pots, you need a big container; the bigger the better. Most beginner gardeners underestimate the size of container needed to support their fully-grown plants.

Gardening Tip: *Make sure your container has at least one hole in the bottom - more is even better. If it doesn't, don't use it, or drill a hole.*



Containers for vegetable plants must be large enough to support plants when they are fully grown. They need to be able to hold enough water to support the roots during the hot summer weather, but still provide adequate drainage. Small containers dry out more quickly, and need more frequent watering. There are also specially designed, self-watering pots, that make watering a little more simple.

There are many possible containers for gardening; clay, wood, plastic, and metal; each type has its advantages. They can be expensive ceramic pots, or you can use cheap, used, black nursery pots. You can even buy garden bags to grow vegetables. The only requirement: it has to hold enough soil; all summer.

Water. Growing vegetables need water - lots of it. However, you don't want to drown your plants. The goal is to keep your soil moist, but not soggy wet.

Don't wait until you see the plants wilting, check them daily. To figure out if your plants need water, stick your finger down into the soil, about an inch. If the soil feels dry, add water. If you're not sure, wait and check it later in the day - don't wait until tomorrow. It is very helpful to use a moisture meter, until you get the 'feel' for your pots. Moisture meters are especially helpful for first time gardeners.

During the heat of summer, you will probably have to water at least once, sometimes twice a day. Proper



watering may be the single most important, and the very hardest, part of growing vegetables in containers.

Inconsistent moisture causes lots of problems, such as blossom drop, poor root development, summer leaf scorch, leaf curling, insect problems and blossom end-rot.

If a container completely dries out, the soil shrinks and pulls away from the pot. Newly added water will just go out along the edge of the pot, and right down to the bottom, instead of soaking into the dry soil; the soil remains dry even after watering. The plant will die unless the soil is able to re-absorb enough water - quickly.

A dry pot will need to be completely soaked in the bathtub, or in another container of water, for about 30-60 minutes. It takes that long for the soil to soak in enough water, that is needed for the soil to swell back to normal.



If the pot is too large to move, poke holes in the soil with a large screwdriver. Water the pot every 10 or 15 minutes for at least an hour. Make sure the water is penetrating into the soil, not just flowing down the sides.

Sun. Most vegetables need full sun - that means at least six hours of direct sunlight each day. Leafy vegetables can usually get by with less. Most herbs can grow well in full sun, or in partial shade locations. If sun is a problem, try moving your pots to different locations during the day. Put it on the east side in the morning, and move it to the west side in the afternoon; or vice-versa. Wheeled plant caddies can make this task much easier.

Soil. Quality potting soil is very, very important for vegetables growing in containers. Don't use soil from your garden, because it will compact in your container, and will not allow water to drain properly. In addition, it may have a few unwanted critters, or it may be infected with a soil disease. Don't just buy bagged topsoil either. Bagged topsoil is not formulated to be used in pots.



Please read our Container Gardening Handout for more detailed information. This handout contains specific information that will help you be successful with your 'Vegetable Garden in Containers'.

Always buy high quality potting soil, it is worth the expense, and it will help you have a more successful experience. **Black Gold Potting Soil** and **Gardeners Gold Organic Potting Soil** are two of the best soils to use in your containers.



Miller's Box Garden Mix is also great for some of your larger containers.

Use fresh potting soil; do not try to reuse the same soil each year. Old soil from containers has usually been depleted of nutrients. In addition, soil insects and soil diseases are very difficult and expensive to control. It is cheaper and easier to start with fresh, healthy soil each year. Recycle your older potting soil by mixing it in the garden.

However, if you have large containers, or if you want to try to reuse the same soil, be sure to follow three very important steps. **1.** Dump out all of the soil from the container. Remove old roots. Smell the soil, if it has an unpleasant odor: discard it. **2.** Mix fresh potting soil 50/50 with the old potting soil. Add a slow release fertilizer, (**Osmocote**) or an organic fertilizer (**Dr. Earth Starter Fertilizer**) to the soil mixture. **3.** Sterilize your container with bleach or Consan.

After three or four seasons, it is best to just discard the old soil, sterilize your container, and buy fresh potting soil.

Fertilizer. Fertilizer is especially important when you're growing vegetables in containers. In fact, you just won't succeed if you don't fertilize properly. If you use a potting soil with fertilizer already added, then your plants will have enough nutrients for 3 to 4 weeks. Be sure to fertilize them after that time.



Vegetable	Minimum Container Size	
Beans, Snap	12" pot	9 plants
Beans, Lima	12" pot	9 plants
Beets	12" pot	9 plants
Broccoli	12" pot	1 plant
	15 gal tub	2 plants
Brussels Sprouts	12" pot	1 plant
	15 gal tub	2 plants
Cabbage	12" pot	1 plant
	15 gal tub	3 plants
Chinese Cabbage	12" pot	1 plant
	15 gal tub	3 plants
Carrot	12" pot	16 plants
Cucumber	20" pot	1 plant
Eggplant	15" pot	1 plant
Kale	10" pot	3 plants
Lettuce	12" pot	9 plants
Mint	10" pot	1 plant
Onion	12" pot	9 plants
Pepper	12" pot	1 plant
Parsley	10" pot	4 plants
Potatoes	15 gal tub	3 plants
Radish	12" pot	16 plants
Spinach	12" pot	9 plants
Squash	12" pot	1 plant
Tomatoes	12" pot	1 plant
	16" to 24" pot is better	
Turnips	12" pot	9 plants

If not, you can sprinkle **Osmocote**, a slow release fertilizer, on the top of your containers. This fertilizer lasts about 3 to 4 months, which saves you from having to remember to fertilize, every week or two, with a water soluble fertilizer.



Remember, containerized plants get watered a lot. Every time you water, you wash some nutrients from the soil, so fertilizer does not last as long in pots as it does in the garden.

If your plants need a little help during the summer, or if you are trying to get your plants to perk up later in the fall, water your containers with **Fertilome Blooming and Rooting Fertilizer** once every week or two. This will give your plants a quick fix during the summer, and it will add a little extra boost for your extended harvest season in the fall.



Advantages of Growing Veggies in Pots

It doesn't require much space, and everyone can do it no matter where they live. Apartments usually have decks; some even have roof tops that can be used for gardening.



It extends your harvest season by allowing you to start your plants indoors one to two months before it is safe to plant them outside. You can then move your plants outside as soon as the weather permits, and you will be one or two months ahead of your neighbors.

Vegetable container gardening is a great way of introducing children to the joys of gardening, and to the benefits of eating fresh produce.



Small salad greens, such as leaf lettuce or spinach, or vegetables such as radishes, which have a quick maturing period, are ideal for pots. You can plant a new crop as soon as you finish harvesting the first crop. You may be able to get several crops of quick maturing vegetables from your container in one summer.

You can plant quick-growing vegetables around your larger fruiting vegetables - right in the same pot. Harvest the 'quick-crop' before the main plants become too large.

With pots, you may be able to work around a sun shortage. Place a wheeled pot caddy underneath a large pot, and move it to follow the sun. For example, move it into the sun in the morning. In the evening, when you want to sit on the patio, just move it out of the way.



It is very easy to take your pot inside before the weather gets too cold. You may be able to enjoy your container garden all winter long.

Container gardening is not limited to vegetables. You can also grow a wide variety of flowers, trees, herbs and fruits in your garden. Flowers can make your garden pop with color and fragrance. Small trees can provide a focal point where it is needed.

More resources:

- http://aggie-horticulture.tamu.edu/vegetable/files/2010/10/E-545_vegetable_gardening_containers.pdf
- <http://ag.arizona.edu/pubs/garden/mg/vegetable/container.html>
- <http://polk.uwex.edu/files/2011/01/Container-gardening.pdf>
- <https://extension.usu.edu/files/publications/publication/HG-524.pdf>