

## Vegetable Gardening in Containers

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If your vegetable gardening is limited by insufficient space or an unsuitable area, consider the possibility of raising fresh, nutritious, homegrown vegetables in containers. A window sill, a patio, a balcony or a doorstep will provide sufficient space for a productive mini-garden. Problems with soil-borne diseases, nematodes or poor soil conditions can be easily overcome by switching to a container garden.

Container gardening lends itself to attractive plantscaping. A dull patio area can be brightened by the addition of baskets of cascading tomatoes or a colorful herb mix. Planter boxes with trellises can be used to create a cool shady place on an apartment balcony. Container gardening presents opportunities for many innovative ideas.

### Media

The growing medium has three main functions:

1. Supply the roots with nutrients, air, and water
2. Allow for maximum root growth
3. Physically support the plant

A fairly lightweight potting mix is needed for container vegetable gardening. Packaged potting soil available at local garden centers is relatively lightweight and may make a good container medium. For a large container garden, the expense of prepackaged or soilless mixes may be quite high. Try mixing your own: Sand, vermiculite or perlite - 1 bushel (8 gal), compost - 1 bushel, 1.25 cups of dolomite, 1 cup of 8-8-8 slow release fertilizer with micro-nutrients.

Deep or large containers require exceptionally large amounts of potting soil. Reduce the amount of potting soil needed by placing light-weight "filler," such as Styrofoam™, packing peanuts, lava rock, empty plastic bottles or commercially available plastic meshes manufactured for this purpose in the bottom of a large container.

### Containers

Almost any type of container can be used for growing vegetable plants. The size of the container will vary according to the crop selection and space available. Regardless of the type or size of container used, adequate drainage is a necessity for successful yields. It is advisable to add about 1 inch of coarse gravel or perlite in the bottom of the container to improve drainage. The drain holes are best located along the side of the container, about 1/4 inch to 1/2 inch from the bottom.

If you are building a planting box out of wood, use ACQ Ground Contact treated lumber, approved by the Food and Drug Administration for food production. Cedar, redwood and synthetic wood are also durable, but more expensive. Regardless of the type of container you use, be sure that there are holes in the bottom for drainage so that plant roots do not stand in water. Most plants need containers at

least 6 to 8 inches deep for adequate rooting. As long as the container meets the basic requirements described above it can be used.

<b>C r o p</b>	<b>S i z e P o t</b>
Lettuce, radish, onions, and beets, most herbs.	3 pint pots
Same as 3pint pots, suitable also for hot peppers and strawberries, chard and dwarf tomatoes	soil volume of 1-2 gallons per plant
Carrot, spinach, broccoli, bell pepper, cherry tomatoes.	3 gallon pots
Full-sized tomato plants, cucumbers, pepper, squash, eggplant	soil volume of 4-5 gallons per plant

### **Crop Selection**

Almost any vegetable that will grow in a typical backyard garden will also do well as a container-grown plant. Best suited for container culture are vegetables which may be easily transplanted. Transplants may be purchased from local nurseries or can be grown at home.

Seeds can also be germinated in a baking pan, plastic tray, pot or even a cardboard milk carton. Fill the container with a good media such as the one previously described, and cover most vegetable seed to a depth of 1/4 inch to 1/2 inch to insure good germination. Another method would be to use peat pellets or peat pots which are available from local nursery supply centers.

The seed should be started in a warm area that receives sufficient sunlight about 4 to 8 weeks prior to the anticipated transplanting date into the final container. Most vegetables should be transplanted into containers when they develop their first two to three true leaves. Transplanting should be done carefully to avoid injury to the young root system.

### **Fertilization**

Plant nutrients are lost from the soil over time through use by plants and by leaching with water. It is important that these lost nutrients be replaced. The easiest way to add fertilizer to plants growing in containers is by preparing a nutrient solution and pouring it over the soil mix. Nutrient solutions can be made by dissolving soluble fertilizer in water *following label directions*. Water soluble fertilizers should be added about mid-season when the plants begin to produce. Use a fertilizer that is recommended for the crop varieties you are growing. For leafy vegetables, high nitrogen fertilizers, such as 12-12-12 or 15-15-15 analyses are appropriate. For vegetables grown for their fruits, seeds, roots, or bulbs, such fertilizers as 6-24-24, 6-12-18, and 8-16-16 or equivalent are satisfactory.

### **Watering**

Proper watering is essential for a successful container garden. Generally one watering per day is adequate. However, poor drainage will slowly kill the plants. The mix will become water-logged and

plants will die from lack of oxygen. If at all possible, avoid wetting the foliage of plants since wet leaves will encourage plant diseases.

### **Location**

Vegetables need:

- 6-8 hours of sun each day
- A reliable source of irrigation
- The garden should be easy and inviting to get to
- Allow space for paths between containers

### **Pest and Disease Management**

Plants should be periodically inspected for the presence of foliage-feeding and fruit-feeding insects as well as the occurrence of diseases. Should problems occur, then the timely application of EPA-approved fungicides and insecticides is advised. Contact your local county Extension agent for the latest information on disease and insect control on vegetable plants.

### **Harvesting**

For the greatest amount of enjoyment from a container garden, harvest the vegetables at their peak of maturity when a vegetable's full flavor has developed. This will yield maximum pleasure from the excellent taste of vine-ripened tomatoes, tender green beans and crisp flavorful lettuce.

### **Reference Sources:**

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