



Container Gardening

Containers are a great option if gardening space is limited, soil conditions are poor, or if you simply want more control over growing conditions. Growing food in adequately sized containers is easy and offers some advantages over growing in the ground. Many gardeners with plenty of garden space still grow certain things in containers. Gardening in containers allows the positioning of heat-loving crops, such as tomatoes and peppers, in full sun or where they will get reflected heat. Ornamental plants grouped in containers are an attractive addition to a deck, balcony or garden area.

Almost any container with adequate drainage will work: ceramic, terra cotta or plastic pots; wine barrels; cattle troughs; cedar boxes. Generally, large plants require wider and deeper growing spaces than small plants. Large containers make more efficient use of space and serve as a heat reservoir to protect plants from freezing in winter or baking on warm summer days. But smaller containers are easier to move and may be better for warm-season crops that you want to start inside or move to protected areas occasionally. Shallow containers, 8 to 10 inches deep, are fine for some vegetables, but they dry out faster than deeper ones. Some crops, such as tomatoes, peppers, carrots and other long-root or large-growing crops require deeper containers.

Soil and Fertilizer

Commercially available potting mixes have many advantages over garden soils for growing in containers. They are light, drain well, hold moisture, are free of disease and widely available. Potting soils are loose and light but will compact when watered. To make sure you have enough soil in a container, gently push the soil down, especially around the edges, as you fill it. When settled, the soil should come to about an inch or so below the container's rim, to allow room for watering.

Soilless mixes are generally low in nutrients, so fertilizers should be added, following the application guidance on the package. Organic fertilizers release slowly and will not be available to your crop as quickly as synthetic ones. Slow-release fertilizers, however, have the advantage of being less likely to burn plants from over-application. Synthetic fertilizers are also available in slow-release forms.

Plant Selection

The basic rule for deciding which edible crops to plant is to grow what you like to eat and what your growing conditions allow. You have control of the soil, so light is the most limiting factor. Most vegetables require a minimum of six hours of direct sunlight a day. Leafy vegetables (lettuce, spinach, chard and various other greens) can tolerate more shade than root crops (beets, carrots, potatoes). Fruiting crops (tomatoes, peppers) will not thrive at all in a shady spot. It is important to grow varieties adapted to our cool, cloudy climate, especially those of heat-loving crops such as tomatoes and peppers.

To get the most food out of a small space, grow crops that can be harvested continually over a long season. Hardy, leafy plants, such as chard, spinach and kale can be harvested this way. You can also prolong the harvest by sowing leaf crops very thickly and thinning them for salad greens. Thinning

allows the remaining plants room to grow, and they can be thinned again each time they get crowded. Grow green onions, leeks, beets and lettuce this way.

Many vegetables can be seeded directly into adequately-sized containers. Follow the seed packet instructions for planting depth. Yields of all crops will be increased by closer spacing, up to a point. A good rule to follow is to grow plants at the distance recommended for space "in rows" on seed packets and ignore the recommendation for space "between rows." For example, a beet seed packet says to space plants 3 to 4 inches apart in rows 12 inches apart. You can grow them spaced 3 to 4 inches apart in both directions by offsetting the seeds. Generally, spacing plants closer will result in a higher total harvest of slightly smaller individual plants. This concept may be economically applied to crops like cabbage, which may be grown very close together (12 inches) to yield more reasonably sized heads than the normal.

Starting plants inside early and moving them outside as weather permits is a good way to get early crops of many plants. Plants must be conditioned (hardened) to withstand the cold and wind they will encounter outside or they will suffer permanent damage from the change. Hardening is done by putting the plants out in a protected area and bringing them back inside at night for several days. Withholding fertilizer and water before putting them outside can also help harden them.

Watering

Watering container-grown plants is a little tricky. Overwatering and underwatering are the most common problems. Remember the water in a container is the only water the plants can get. They cannot send their roots deeper to find water. Large plants drink a lot on warm summer days and they must be watered often. On the other hand, you don't want to drown plants either. Water does not drain from a container as easily as it does in a garden. A good potting mix is essential for soil drainage.

The best guide to whether a container planting needs watering is to stick a finger 2 or 3 inches into the soil and see if it is moist. If it is dry, water! Of course, if there are seeds growing, the soil should be moist all the way up to the surface. Check every day until you get a good sense of how often your plants need water. They may need watering every day during the warmest part of the summer. Water pots until the water starts to come out the bottom of the container. Then try the finger test again. Potting mixes can be difficult to rewet once they dry out. Often water will not penetrate these mixes and will just drain along the side of the container and out the bottom. If the soil is still dry an inch or two down even though water is draining out the bottom, try breaking up the top layer with your fingers or a trowel, poke some holes a few inches down, and then water again.

While much of what we grow in our demonstration gardens is in raised beds, many of the plants are well suited to containers. Visit our demonstration gardens during the growing season: find a location at <https://extension.wsu.edu/king/mg-home/educational-outreach/many-demo-gardens/>

Additional Master Gardener Tip Sheets, including "Gardening Websites" and "Gardening Publications" are available at <https://extension.wsu.edu/king/mg-home/gardening-resources/tip-sheets/>

Also see WSU's "Gardening in Washington State" at <https://mastergardener.wsu.edu/resources/gardening-in-washington-state/> and free downloads of WSU gardening publications at pubs.extension.wsu.edu

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