Master Gardener Corner: Container Gardening with Veggies

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There's a lot of interest in growing vegetables this year, but not everyone has a big backyard for a vegetable garden. If you have limited space for a garden, or if your mobility is limited, having a vegetable garden may seem out of reach. Container gardening to the rescue! You can grow a productive container garden almost anywhere - in a window box or on a balcony, patio, or a flat roof top. Many kinds of vegetables and herbs can be grown in containers. Plant breeders are also breeding plants with more compact growth habits and relatively high yield which make them suitable to containers.

To get started you need a suitable container, growing media, plenty of sunlight, water and nutrients. Choosing a location for your garden is the most important step when planning a vegetable garden, whether you are planting in the ground or in containers. Most herbs and vegetables need 6 to 8 hours of sunlight for optimum growth. Leafy vegetables such as lettuce, mustard greens, spinach and parsley can tolerate some shade. Vegetables that are suited for growing in containers include tomatoes, peppers, eggplant, green onions, potatoes, beans, lettuce, squash, beets, radishes, basil and parsley.

Be sure your water source is close by as container-grown plants tend to dry and wilt more quickly than plants in the ground. Watering requirements will vary according to the season, type of container, soil mix and exposure. Containers tend to dry out quickly and will need to be checked daily. The best way is to stick your finger into the top inch of soil. If it feels damp you're all set. If the planting material feels dry, water plants thoroughly. Let the water run out of the bottom drainage holes. Do not allow the containers to dry out completely between watering as this will lead to flower and fruit drop. Over watering plants can be just as bad as under watering, as plants will become waterlogged. Too much water deprives the roots of oxygen which will result in poor growth and possibly kill the plant. Avoid wet foliage at night as this allows disease organisms to flourish.

There are “self-watering” containers that have a reservoir built in beneath the media. With these containers you will not have to water as often, but you still need to keep the reservoir filled. As plants mature they will use more water and in hot weather you may need to add water daily. To help reduce water loss mulch can be placed on top of the soil mix.

Containers are available in many different sizes, shapes and materials. When picking a container take into consideration the pot depth, drainage, size, weight and durability. Suitable materials include clay, resin, metal, plastic and wood. Containers for vegetable plants must be big enough to support fully grown plants. Smaller containers dry out very quickly in summer so it is better not to use anything smaller than an 8 to 12-inch diameter pot outdoors. Shallow rooted crops like lettuce, spinach, radishes and herbs need a container 8 to 9 inches deep. For root crops such as carrots, potatoes and turnips pick a container that is twice as deep as the length they will reach at maturity. Vegetables with extensive root systems such as...
eggplant, cucumbers, squash and tomatoes need containers at least 16 to 24 inches deep. Bushel baskets, half barrels or wooden tubs are ideal containers for larger plants.

The growing medium you use in your containers must be porous in order to support plants, as roots require both water and air. Do not use garden soil to fill your containers as it may contain diseases, fungi and weed seeds. It may also be too dense to provide good aeration and drainage, especially if you have a clay soil. Buy a quality, sterilized soil mix. The ideal planting medium for containers should provide rapid drainage with sufficient water retention to keep the root zone uniformly moist. Soilless potting mixes are ideal as the components are lightweight and hold water and oxygen better than garden soil. Soilless mixes are also free of weeds and diseases.

Two to four weeks after planting begin applying a water-soluble fertilizer mixed at half strength. Continue to apply fertilizer every two to three weeks unless you supplemented the soil mix with a slow release fertilizer. Do not add more than the recommended rate, since this can cause fertilizer burn and it could kill your plants. If the soilless mix has added fertilizer then your plants will have enough nutrients for 8 to 10 weeks. Adding some compost to your medium, before you plant, will provide needed trace elements.

When choosing your plants or seeds, look for high yielding and dwarf varieties with moderate to standard sized fruit. Choose bushy rather than vining plants. Plant breeders are now producing plants that perform well in containers. If plants will need stakes or a trellis, put it in the pot when you first plant the seeds or transplants so that you do not damage roots later.

Inspect your containers every day to help spot problems before they get out of control. Look for signs of insects or diseases and see if plants are getting enough water and fertilizer. By checking your pots often, you will also be more likely to harvest your produce at the peak of ripeness.

Growing vegetables in containers is a great way to grow your own food if you don’t have the space. There are many kinds of plants and containers to choose from so gardeners are limited only by their imagination. Happy planting!

The Cornell Garden Based Learning site has a variety of resources for vegetable gardening at [http://gardening.cals.cornell.edu/garden-guidance/foodgarden/](http://gardening.cals.cornell.edu/garden-guidance/foodgarden/).

Sources for this article include: Cornell Cooperative Extension, Kansas State University, North Carolina State University, University of Illinois Extension, Texas A&M, Ohio State and Arizona Cooperative Extension.