

# How to Plan a Vegetable Garden



Five Steps to Avoid Becoming THE Problem in YOUR Vegetable Garden.

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I have been growing my own vegetables for the last thirty years. I have grown vegetables in the ground, raised beds, and containers. During those years I have enjoyed good and bad harvests. Sometimes the problems which resulted in a poor harvest were not my fault and sometimes the problems where the result of poor gardening practices.

One year I decided to grow corn. I educated myself on how to plant corn, the best soil to use, watering frequency, and how often to fertilize. After several months I was rewarded with a large crop of corn that I planned to harvest for a barbecue on Labor Day. On the morning of the harvest I discovered a black bear sleeping in my garden after devouring all my corn. This disaster was compounded by the fact that I had decided to plant the corn in the middle of my vegetable garden, so although the bear did not eat anything else, he managed to trample the rest of my garden to get to my corn. Another year I decided to grow pumpkins thinking that growing pumpkins was no different than growing tomatoes. Too late, I discovered that growing pumpkins requires a different set of gardening knowledge — so after an entire summer of tending my pumpkin patch I had nothing to show for my efforts. What follows are five things you need to know to not become the problem in your vegetable garden.

Step One: Research the best irrigation practices for your garden to avoid overwatering or under watering your plantings. Research has shown that the most common cause of plant failure is too much or too little watering. Generally speaking, most vegetables need to be deep watered at least two to three times a week. However this can change depending weather conditions, the type of vegetable, soil used for planting, and whether the plant is in the ground, a raised bed, or container.

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Step Two: Know your plants and what is required to get the maximum harvest. For example, tomatoes are either classified as determinate or indeterminate. Determinate plants will produce a single crop all at once and then die. Indeterminate tomatoes will continually produce fruit until killed by a freeze. Pruning an indeterminate tomato will usually improve yield and reduce disease. Pruning a determinate tomato will reduce your harvest. Determinate tomatoes work well in containers and can be held upright with a single stake. Indeterminate tomatoes grow well in raised beds but should be grown with a tomato cage. Cucumbers, pumpkins and squash have male and female flowers. The male flowers on squash are edible, but fruit is produced only on the female flower. Male flowers are more numerous and usually appear first, however pruning or watering your plants when the flowers are open is a certain guarantee of getting a poor or nonexistent harvest.

Step Three: Know what fertilizers and soils work best for your particular type of planting. Different soils have vastly different applications in your garden. “Soil amendment” covers a whole range of organic materials, manures, compost mix, and may even not contain any soil. “Top soil” is not garden soil and is best used for lawns. “Garden soil” will suffocate plants grown in containers. “Potting soil” is recommended for raised beds but not containers. “Potting mix” is recommended for containers but will not enhance your in-ground garden and may even hinder fruit production. To add to the confusion, some stores use the terms interchangeably. When in doubt, read the manufacturers’ recommendation printed on the back of the bag. Planting soil or seed starting mix is only used to grow seedlings. Using planting/seed starting mix as the only soil for a container plant will result in a big green plant with lots of flowers and no fruit. Planting soil/seed starting mix is designed to encourage new growth and root development but does not provide the nutrients needed for fruit production. For those of you who think you can avoid this confusion by just using soil from your yard in containers, from experience I can tell you that you might as well plant your vegetables in cement as the result will be similar.

Step Four: If you are going to grow in containers, then use the appropriate size container. Peppers, eggplants and cucumbers can usually do well in a three to five gallon container. Tomatoes, squash and pumpkins require at least a ten gallon container to ensure a good harvest. Small containers can crowd the roots and contribute to the development of disease or problems such as blossom end rot. The type of container you choose — terracotta, cloth, plastic, or glazed — also has an impact on watering and fertilization needs. Dark containers absorb heat and can actually cook the roots of your plant if precautions are not taken.

Step Five: Do not run for the pesticides at the sight of a bug. One bug may not be a problem but one application of pesticides could seriously impair your garden’s ability to pollinate and fertilize the fruit-bearing flowers. For every bad insect there is usually a good insect that preys on that bad one for food or an incubation chamber for its offspring. Pesticides kill everything — good and bad. Remember some insects such as aphids are seasonal, so if caught early can be removed or washed off the plant. Your garden does not exist in isolation. There is insect, microbial, and fungal activity occurring both below and above ground. Some of this activity is necessary for the health and well-being of your garden. Again, if you must use pesticides then be sure to read the label prior to using in your garden.

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The goal of this article is to raise more questions than provide answers. Educate yourself on the best growing practices. Always read the labels on packaging. When in doubt, ask questions.

There are two more Public Education classes this month.

“Saturdays with Barry” will be June 10, 9:00-11:00 am. Master Gardener Barry Wold will explain various planting, thinning, and pest control methods for the vegetable garden. Join us at the Sherwood Demonstration Garden, 6699 Campus Drive, Placerville. Note: a \$2 campus parking fee has gone into effect for all days.

“Control of Noxious and Invasive Weeds” will be lead by Master Gardener Steve Savage. Learn about aggressive non-native weeds which displace natives, decrease wildlife habitat, and reduce recreational and land values. Discover ways to identify, control, and report invasive weeds of county-wide concern. Then take a look at weeds commonly found in the home landscape, their culture, and control strategies. June 14, 9:00 am-noon at the Cameron Park Community Center, 2502 Country Club Drive, Cameron Park.

UCCE Master Gardeners of El Dorado County are available to answer home gardening questions Tuesday through Friday, 9:00 a.m. to noon, by calling [\(530\) 621-5512](tel:(530)621-5512). Walk-ins are welcome at our office, located at 311 Fair Lane in Placerville. For more information about our public education classes and activities, go to our UCCE Master Gardeners of El Dorado County website at <http://mgeldorf.ucanr.edu>. Sign up to receive our online notices and e-newsletter at[http://ucanr.edu/master gardener e-news](http://ucanr.edu/master_gardener_e-news). You can also find us on Facebook.