

Small plot vegetable gardening

Many people grow their own fruits and vegetables for fresh, quality produce. However, the traditional, large, backyard garden doesn't fit everyone's lifestyle. Instead, some gardeners use intensive gardening techniques that help them get the most from their smaller plots. Container vegetable gardening is another option. This publication provides recommendations and techniques for growing quality vegetables in a limited space.

Site Selection and Preparation

Choose a site that receives at least six hours of sun each day. Vegetables grown in shady locations are usually less productive and of poor quality.

If possible, turn the soil in the fall. If not, rototill, spade, or plow the area to a depth of 6 to 8 inches in early spring, or as soon as the soil can be worked. Do not turn soil when it is wet because it will remain hard and lumpy all season. Remove clumps of sod, sticks, stones, and other debris, and level the area with a rake.

Just before leveling the soil for the last time, spread a complete analysis fertilizer, such as 10-10-10 or 6-10-4, evenly over the garden. Use 1 to 2 pounds per 100 sq. ft. (10 ft. x 10 ft.). For very small areas, use 3 to 4 teaspoons of fertilizer per square foot. Then rake the fertilizer into the soil.

Planning

Plan your garden on paper before planting. Determine the amount of space you have available, then decide what crops to grow. Be sure to allow adequate space for each plant to grow. When planning, consider incorporating some space-saving techniques. (Several space-saving techniques are discussed in the following section.) By planning your garden on paper you will know how many plants and seeds to purchase. Mark

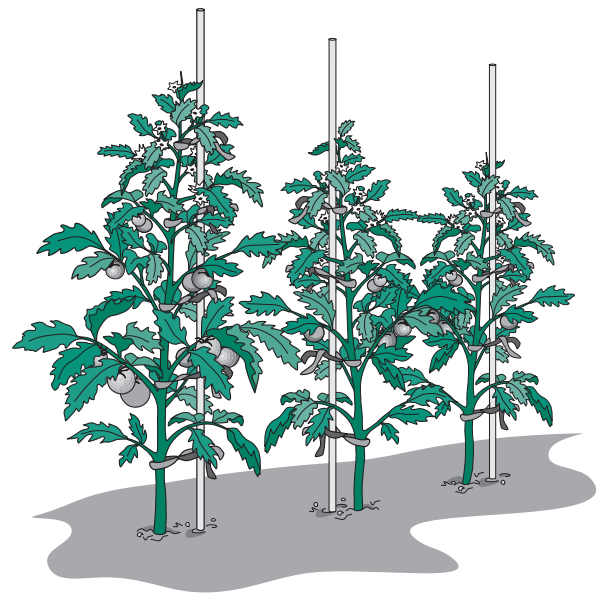
out the garden area with stakes before you plant so you know where each crop will be planted.

Space Saving Techniques

Interplanting—Grow two or more vegetables in one area by planting slow (long season) and fast maturing (short season) crops. The fast maturing vegetables will be harvested before the crops begin to crowd each other. Harvesting the short season crop also provides additional space for the later maturing vegetables. Interplanting can be accomplished by sowing the seeds of a fast and slow growing vegetable together in the same row. For example, radishes (fast maturing) and carrots (slow maturing) can be sown together. Another method is to alternate rows of fast and slow maturing vegetables. An example would be a row of leaf lettuce between two rows of tomatoes.

Succession planting—As soon as one crop is finished, plant another. When cool-season crops, such as lettuce, spinach, radishes, and peas are harvested, replant with beans, beets, or summer squash.

Use vertical space—Use a trellis or fence to support pole beans, cucumbers, and squash. Cage or stake tomatoes.



Wide row planting—Scatter seeds over an 8- to 12-inch wide-band rather than in a single row. This method is excellent for leafy vegetables, such as spinach and lettuce, which form a leaf canopy that prevents weed growth. Carrots and onions, however, do not produce a dense leaf canopy and may require tedious hand weeding between the plants within the band.

Bush varieties—Plant “bush” varieties of cucumber, muskmelon, watermelon, and squash that produce fruit on much shorter vines. These plants take up less space in the garden than standard varieties. See Table 1 for recommended bush varieties.

Square foot gardening—This is a form of intensive gardening in which the garden is marked off into squares of space for crops rather than planting in straight rows. The name comes from partitioning blocks of garden space that are 1 ft. x 1 ft. A common arrangement is to mark off squares that are 4 ft. x 4 ft. (16 sq. ft.). This area is then divided into four parts that are 2 ft. x 2 ft. One tomato plant or equally spaced seeds are then planted in these square areas, depending on the space needs of the plant. (For more information, see *Square Foot Gardening*, by Mel Bartholomew, Rodale Books, 2005.)

Summer Care

If crops are planted in wide rows or square-foot plots, hand weeding will be necessary until the canopy of the foliage covers the area and prevents weed growth. For minimum maintenance and weed control, apply an organic mulch around the plants after the soil has warmed. A mulch also helps retain moisture in the soil. Grass clippings (3 to 4 inches), straw (4 to 6 inches), and sawdust (1 to 2 inches) are excellent mulches. Water is one of the most limiting factors for good plant growth. Most vegetables require 1 inch of water per week. Irrigate the garden weekly during hot, dry weather.

For more information

Additional information about vegetable gardening and other horticultural topics is available from local extension offices and from these Web sites:

ISU Extension Distribution Center (online store)—
<https://store.extension.iastate.edu/>

ISU Extension Horticulture—
www.yardandgarden.extension.iastate.edu

Table 1. Suggested vegetable varieties for small plot gardens

Beets	Red Ace, Ruby Queen
Carrots	Danver's Half Long, Little Finger, Nantes Half Long
Cucumber	Patio Pickle, Pickle Bush, Salad Bush, Spacemaster
Eggplant	Black Beauty, Black Bell II
Green Beans	Derby, Provider, Topcrop
Lettuce	Black Seeded Simpson, Buttercrunch, Green Ice, Green Salad Bowl, Red Sails
Muskmelon	Honey Bun, Minnesota Midget
Parsley	Champion Moss Curled, Dark Green Italian
Pepper	Bell Boy, Cajun Belle (hot), Lady Bell, Mariachi (hot), New Ace, Orange Blaze
Pole Beans	Blue Lake, Kentucky Blue
Radishes	Champion, Cherry Belle, Comet, Sparkler, White Icicle
Spinach	Long Standing Bloomsdale, Melody, Tye
Summer Squash	Pic-N-Pic, Zucchini Elite
Swiss Chard	Fordhook, Lucullus
Tomatoes	
Standard	Bush Early Girl, Celebrity, Jetstar
Patio	Patio Hybrid, Patio Princess
Grape	Red Candy, Sweet Zen
Winter Squash	Bush Delicata, Bush Table Queen

Originally prepared by Linda Naeve, former extension horticulture associate. Revised by Richard Jauron, extension horticulturist.

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