



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 6 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 all 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. Then rake the fertilizer into the soil. Use 1 to 2 pounds per 100 sq. ft. (10 ft. x 10 ft.). For small beds, use 3 to 4 teaspoons of fertilizer per sq. ft.

Planning

Plan your garden on paper before planting. Determine the amount of space you have available, then decide what crops to grow. Incorporate some of the space-saving techniques below. In small yards, for example, fences can be used to support pole beans or cucumbers. Because space is limited, do not crowd the plants. Be sure to allow plenty of room for each plant to grow. 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.



Vegetables can be beautifully integrated into a landscape.

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 turnips.

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.

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

Bush varieties—Plant “bush” varieties of cucumbers, 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 Press, 1981.)

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

Ask your county extension office for these publications.

Pm-870B *Container Vegetable Gardening*

Pm-731 *Harvesting and Storing Vegetables*

Pm-230 *Insect and Disease Management in the Home Garden*

Pm-819 *Planting a Home Vegetable Garden*

Pm-534 *Planting and Harvesting Times for Garden Vegetables*

This publication and many others are available at <http://www.extension.iastate.edu/Pages/pubs/>.

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Table 1. Suggested vegetable varieties for small plot gardens

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| Beets | Ruby Queen |
| Carrots | Little Finger, Denver's Half Long, Nantes Half Long |
| Cucumber | Salad Bush, Bush Champion, Spacemaster |
| Eggplant | Dusky |
| Green Beans | Topcrop, Tendercrop, Derby |
| Lettuce | Green Ice, Salad Bowl, Red Sails, Black Seeded Simpson, Buttercrunch, Oakleaf |
| Muskmelon | Minnesota Midget, Honey Bun Hybrid |
| Parsley | Dark Moss Curled, Paramount |
| Pepper | Lady Bell, Gypsy, Crispy, New Ace, Bell Boy, Red Chili (hot) |
| Radishes | Champion, Comet, Sparkler, White Icicle, Early Scarlet Globe |
| Spinach | American Viking, Long Standing Bloomsdale, Melody |
| Summer squash | Pic-N-Pic (yellow crookneck) |
| Swiss chard | Fordhook Giant (white ribbed), Lucullus (green ribbed) |
| Tomatoes | |
| Standard | Jetstar, Celebrity, Super Bush |
| Patio | Patio |
| Cherry | Pixie |

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Stanley R. Johnson, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.

File: Hort and LA 2-9