

Where to put your vegetable garden

Location

The amount of sunlight, soil type, and other factors are primary considerations when selecting a garden site. Fitting garden areas into the overall design of the landscape also can enhance the property value.

Soil—Vegetables grow best in a well-drained, fertile soil. A well-drained soil is one through which water moves rapidly. When drainage is poor, water replaces the air in soil and roots suffocate. Roots will not develop without a constant supply of oxygen.

Less than ideal soil can be helped by improving drainage and soil structure. Incorporating organic matter (compost, peat moss, or manure) into tight soils will open them up and improve drainage. If necessary, agricultural tile can be installed to assist in drainage.

The site should be fairly level to avoid erosion problems. If a slope is the only choice available, run rows across the slope to form contour terraces. This should help minimize soil erosion during heavy rains.

Sunlight—Avoid planting a vegetable garden near buildings, trees, or shrubs that may shade the garden. Most vegetables need at least six hours of full sunlight daily to produce a good crop. If the best, well-drained location has some shade, locate cool-season crops, such as lettuce, spinach, radishes, and cabbage, in partial shade. They can tolerate low light intensities. Warm-season crops, such as sweet corn, snap beans, tomatoes, and peppers, need full sun.

Trees—Trees and shrubs compete with vegetables for soil moisture and plant nutrients. Walnut trees pose an additional problem because they produce a toxin that can injure some vegetables, such as tomatoes, eggplants,

and peppers. Plant these vegetables at least 50 to 60 feet away from walnut trees.

Convenience—Locating the garden near the house and a water supply makes it easier to maintain and simplifies harvesting.

Size

Garden size depends on the desired kinds and amounts of vegetables, suitability of available land, and amount of time available for garden chores. A manageable size is 100 square feet (10 ft. by 10 ft.). The garden should be large enough to be interesting and enjoyable, but not so large that it becomes a burden.

Plant only the amount needed—whether it is to eat fresh, preserve, share, or sell. A large family may be able to use the vegetables from a half-acre garden.

Planning the garden

A well-planned garden can make planting go quickly and efficiently. Organizing a garden in advance also can save steps and time later in the season, increase garden productivity, and allow the gardener more leisure time. In January or February, begin planning the garden on paper. The plan should include varieties to be planted, row and plant spacing, and projected planting dates. Make a sketch of the garden area showing the dimensions of the garden. Draw it to scale, allowing for as much detail as possible.

Plant placement—Arrange crops so planting, cultivating, pest control, and harvesting can be done with the least effort. Plant perennial crops, such as rhubarb, asparagus, strawberries, and bush fruits along one side of the garden. These crops stay in the same location for several years and should be placed where they will not be in the way or be damaged at soil preparation time. Whenever possible, plant tall crops to the north of lower growing crops to avoid shading.

Plant rotation—Many disease organisms are soil-borne and can infest a vegetable yearly when the same crop is planted in the same location. Plants in the same botanical family often are susceptible to the same diseases. For example, tomatoes, peppers, eggplants, and potatoes belong to the Solanaceae family and all are susceptible to early blight (*Alternaria solani*). Rotating vegetable placement in the garden helps to control plant diseases. Rotation also helps curb insect infestations. Some insects overwinter in the soil and begin feeding when their specific host is present. If a crop is moved to a different location in the garden, the insect population may decrease.

Garden records—Keeping garden records in one place, such as in a three-ring binder, simplifies garden planning. Include items such as soil test records, planting maps, fertilizer applications, order forms from catalogs or Web sites, and information about varieties that have been planted or that you might want to try in the future.

Vegetable selection

Choosing which vegetable variety to plant can be bewildering because so many are available. Consider factors such as disease resistance, maturity date, yield, size, shape, and color. Request several seed company catalogs and compare offerings. The publication, *Suggested Vegetable Varieties for the Home Garden* (PM 607), is available from local ISU Extension offices and at the Web sites listed at the end of this publication.

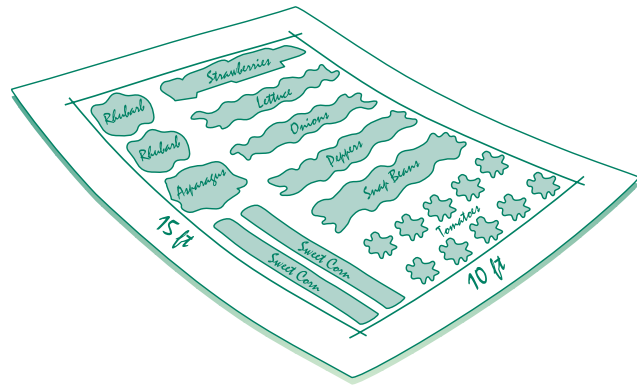
First-year gardeners may prefer to select easy-to-grow vegetables, such as lettuce, onions, peas, spinach, tomatoes, snap beans, beets, and summer squash.

The size of the garden also dictates what can be planted. Midget or bush varieties of many vegetables are available; they require much less growing space than regular varieties. Interplanting, succession planting, trellising, and staking also increase the efficient use of small garden plots.

Get more from your garden space

If space is limited, try these intensive cropping techniques.

Companion crops—Mix radish and carrot seeds and plant together. Radishes are a short-season crop so will be harvested before the carrots need room to grow. This is also a good method of thinning the carrots.



Succession planting—After short-season crops, such as peas or spinach, have stopped bearing, remove them. Plant carrots, beets, Swiss chard, or green beans for a later crop.

Interplanting—Slow starting, late-planted crops, such as tomatoes, peppers, bush squash, and cucumbers, may be planted between rows of peas, spinach, and other short-season crops. The short-season vegetables will stop producing with the arrival of hot weather and can be removed.

Staking and trellising—Some crops, such as tomatoes, cucumbers, and pole beans, may be supported by stakes, poles, trellises, or fences and grown upright rather than on the ground. The plants take up less room when grown this way.

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

www.extension.iastate.edu/store

ISU Extension Horticulture—

www.yardandgarden.extension.iastate.edu

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