

Plan Vegetable Gardens before Planting

For productive plants and quality vegetables, take time now to plan the layout and design of home vegetable gardens before tilling the soil. Choosing an appropriate site for planting depends on the number of family members consuming the produce, how much time the gardener has to care for plants and available yard space. If possible, plan to plant an extra few rows and donate the produce to the food bank.

Well-drained, fertile sandy loam soil and good sun exposure are important for optimum growing conditions. A wall or hedge on the windward corner of the garden will help protect it from wind damage in the spring. Avoid planting in shaded areas, and don't plant too close to shrubs and trees because the roots can compete with vegetables for water and nutrients. Also, plant near a water source for easy irrigation.

Synthetic or organic fertilizer will meet most soil needs. The first number on the front of fertilizer bags stands for the percent of nitrogen it contains. Nitrogen is important for vegetative growth. Nitrogen readily dissolves in water and is usually applied in split applications-part before planting and part after plants emerge-to make sure plants receive a steady supply of nitrogen throughout the growing season. The second number on the bag stands for percentage of phosphorus (P2O5). Apply phosphorus before planting and incorporate into soil so plant roots can absorb it. Phosphorus is important for root and fruit growth. Potassium (K2O), the third number on the bag, rounds out the nutrients that plants need in large quantities. Other minor elements can be added with compost, which should be applied before planting and incorporated into the soil. Compost increases the organic matter of soil and improves soil structure.

Vegetables are traditionally grown in long rows with elevated beds that help warm up the soil sooner in spring than if planted flat on the ground. Plants are usually irrigated by running water down the furrows between beds, but much of the water is wasted that way because it seeps to below plant roots. Use drip irrigation to concentrate moisture in the root zone and conserve water.

Vegetables can be planted from seeds or as transplants. Plant seeds at a depth of four times the diameter of the seed. Plant transplants in the late afternoon and water immediately. Cover the ground between rows with mulch to reduce water evaporation and to discourage weeds from germinating. Organic mulches can help cool the soil on hot summer days. Organic mulch also adds nutrients to soil.

This article adapted from Cooperative State Research, Education and Extension Service, USDA. Please contact Ken Churches at cdcalaveras@ucdavis.edu or (209) 754-6475 with your agricultural questions. To speak with a Certified Master Gardener: Calaveras (209) 754-2880, Tuolumne (209) 533-5696, Amador (209) 223-6837, El Dorado (530) 621-5543.

