

Fruit and Vegetable Production

Lesson 5: Vegetable Production

The term vegetable is generally used to refer to the edible portion of herbaceous (nonwoody) plants—the roots, stems, leaves, flowers, or fruit.

Plant Considerations

There are many different varieties and hybrids of most types of vegetables. A variety is a plant that occurs naturally or through cultivation and differs from other members of its species by one or more characteristics. A hybrid is a plant that results from interbreeding two distinct cultivars, varieties, or species. Varieties and hybrids offer certain desirable characteristics, such as good size, flavor, and appearance and resistance to certain pests and diseases. Consideration must be given to what varieties and hybrids are appropriate for a particular area and climate when choosing vegetables to grow.

Cool Season Crops

A cool season crop is a crop that grows best during the cool temperatures of fall and spring. Cool season crops prefer temperatures between 50°F and 70°F. These include beets, carrots, potatoes, cabbage, cauliflower, and many others. Cool season crops are very tolerant of cold weather and can usually stand a light frost.

Two primary types of cool season crops are root crops and surface crops. Root crops are vegetables that are primarily cultivated for their edible roots, tubers, or modified stems, which grow below ground. Surface crops are grown for edible parts—leaves, flowers, and “fruits”—that grow above ground.

Warm Season Crops

Warm season crops are crops that are severely harmed by frost and do not grow well until the temperature is at or above 70°F. Examples of warm season crops include tomatoes, eggplants, and corn. Warm season crops should only be planted when soil temperatures are warm enough to induce sprouting.

Long Season Crops

Long season crops are vegetables that require a relatively long growing season to mature compared to other plants. Examples of long season crops include pumpkins, gourds, and watermelons.

Vegetable Chart Components

Different types of vegetables will be explored in this lesson using a chart format. (See Fig. 5.1.) The chart addresses some of the most important factors that must be considered when deciding what vegetables to grow. Descriptions of each heading are given following the sample chart. Recommendations will vary depending on such factors as the local climate and region and the specific varieties of vegetables grown.

Figure 5.1 – Sample Vegetable Chart

Cool Season Root Crop

Days to Germination	
Days to Maturity	
Soil	
Spacing	
Harvest	
Postharvest	
Production Concerns	
Pests and Diseases	
Other Considerations	

- **Days to Germination:** The days to germination is the estimated number of days before a plant will begin to grow and sprout.
- **Days to Maturity:** The days to maturity is the estimated number of days from planting until a usable or salable product can be harvested.
- **Soil:** This section of the chart explains what soil conditions are desirable for the plant to grow, such as the recommended soil pH, texture, and drainage.

- **Spacing:** Spacing requirements provide a guideline for how much space to leave between plants and rows to allow adequate room for growth, cultivation, and harvesting.
- **Harvest:** The harvest section provides general guidelines to help determine when the crop is ready to be harvested and how to harvest the crop.
- **Postharvest:** Proper storage and handling procedures are listed in the postharvest portion of the chart.
- **Production Concerns:** Crop-specific information to facilitate proper growth and production is supplied in the production concerns section.
- **Pests and Diseases:** This section lists common pests and diseases that affect the specific crop.
- **Other Considerations:** This heading provides a place to include crop-specific concerns that are not associated with other areas of the chart.

Summary

Vegetables are the edible portions of herbaceous plants. They can be divided into three general categories based on their growing season: cool season, warm season, and long season crops.

The charts that accompany this lesson summarize a number of key elements needed to produce a successful vegetable crop. Recommendations will vary depending on specific crops and growing conditions.

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Credits

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