

Cucumber

PLANTING

Cucumber (*Cucumis sativus*) is a warm-season vegetable that grows best at temperatures between 75 and 85 F. Cucumbers are very tender and can be killed by even light frosts. Start cucumbers in your garden either from seed or transplants.

Plant seed after the danger of frost has passed and the soil has warmed. Seeds will not germinate at soil temperatures below 50 F; the ideal soil temperature is 70 F. Grow transplants indoors in peat pots two to three weeks prior to outdoor planting time. Both spring and fall crops may be grown.

PLANTING DATES		
Area	Spring	Summer
Piedmont	Apr.15-May 15	July 1-15
Central	Apr. 1-15	Aug. 1-10
Coastal	Mar. 20-30	Aug.1-20

Space plants 8 to 10 inches apart in rows that are 5 feet apart if cucumbers are untrellised. If cucumbers are trellised, plant four to five seeds per foot in rows spaced 30 inches apart. When plants are 4 to 5 inches high, thin so they are 9 to 12 inches apart. It is often better to plant a second crop around August 1 than to try to continue harvesting an early planting until frost.

CULTIVAR TYPES

Burpless cucumbers are long and slender with a tender skin. Bush varieties produce well in a limited amount of space and are a good alternative in the garden when trellising is not possible. New varieties are being released which are advertised as all-female or gynococious types. These plants tend

to bear fruit earlier with a more concentrated fruit set and better yield, since they have either a greater proportion of female flowers or female flowers only.

CULTIVARS

- **Slicers** - Salad Bush (hybrid), Straight Eight, Sweet Slice, Sweet Success (hybrid), Burpless (hybrid), and Poinsett 76
- **Picklers** - Fancipak (hybrid), Calypso, Carolina, County Fair, Homemade Pickles And Regal

SOIL

Cucumbers grow best in a well-drained sandy loam to clay loam soil that is high in organic matter. A slightly raised bed will aid in drainage and may help control certain diseases. The soil pH should be between 5.8 to 6.5.

FERTILIZING

Cucumbers require moderate amounts of fertilizer. A soil test is always the best method for determining the fertilization needs of the crop. Information on soil testing is available in the fact sheet HGIC 1652, *Soil Testing*.

If a recent soil test has not been taken, make a preplant application of 5-10-10 at the rate of 3 pounds per 100 square feet. This initial preplant application will normally supply all of the phosphorus and potash needed by most garden vegetables. Sidedress cucumbers with an additional application of nitrogen fertilizer one week after blooming begins and again three weeks later using 1½ ounces of 33-0-0 per 10 feet of row. Apply this fertilizer along one side of the row and about 4 to 6 inches from the plants depending on their size.

WATERING

Cucumbers have a shallow root system and can suffer when no irrigation is provided during droughts. Practice good cultivation and provide adequate moisture. Water the garden to provide a uniform moisture supply to the crop. Water sufficiently to moisten the soil to a depth of at least 6 inches. The critical period for moisture is during fruit set and fruit development.

Mulching can help provide uniform moisture, conserve water and reduce weeds. Spring-planted cucumbers can be harvested earlier if mulched with soil-warming black plastic. Organic materials are useful in the summer to keep the fruit clean in non-trellised plantings.

CULTURAL PRACTICES

Most varieties of cucumber vines spread from row to row. Training on a trellis or fence along the edge of the garden will correct this problem and also lift the fruit off the soil. A satisfactory trellis is one that is about 6 feet high with a top and bottom wire and plastic twine tied between the two wires at each plant. Posts should be no more than 15 feet apart and the top wire must be very tight.

HARVESTING AND STORAGE

Cucumbers should be ready for harvest in about 50 to 70 days depending on the variety. Pick as frequently as necessary to avoid oversized fruit. The more you pick, the more the vines will produce. Harvest when cucumbers are about 2 inches long up to any size before they begin to turn yellow, in about 15 days. Remove fruit by turning cucumbers parallel to the vine and giving a quick snap. This prevents vine damage and results in a clean break. Store cucumbers in the refrigerator. The optimal conditions for storage are temperatures of 45 to 50 F and 95-percent relative humidity.

PROBLEMS

Misshapen fruit is often due to low fertility or poor pollination. Failure to set fruit can be caused by too few bees for adequate pollination, no pollinating plants for gynocious hybrids or changes in temperature. Fruit is only produced when insects carry pollen to a female cucumber flower, and honeybees are essential for this purpose. Also the first 10 to 20 flowers on a plant are male and will not produce fruit. Bitterness can be due to temperature variations of more than 20 F and storage of cucumbers near other ripening vegetables.

The major pests that feed on cucumber are cucumber beetles, pickleworms, aphids, mites, whiteflies and the squash vine borer.

Diseases that occur in the home garden include powdery and downy mildew, anthracnose, gummy stem blight, bacterial wilt, mosaic viruses, target spot and belly rot. Most of these diseases are not a problem in the spring except for bacterial wilt. Look for downy and powdery mildew to occur in late spring. The others are mainly problems during the fall.

More information on controlling cucurbit diseases and insects is available in HGIC 2206, *Cucumber, Squash, Melon and Other Cucurbit Diseases*; and HGIC 2207, *Cucumber, Squash, Melon and Other Cucurbit Insects*.

Excerpted from *Home Vegetable Gardening*, EC 570, 2002.

Originally prepared by Nancy Doubrava, HGIC Information Specialist, and Robert J. Dufault, Coastal REC, Clemson University.

This information is supplied with the understanding that no discrimination is intended and no endorsement by the Clemson University Cooperative Extension Service is implied. All recommendations are for South Carolina conditions and may not apply to other areas. Use pesticides only according to the directions on the label. All recommendations for pesticide use are for South Carolina only and were legal at the time of publication, but the status of registration and use patterns are subject to change by action of state and federal regulatory agencies. Follow all directions, precautions and restrictions that are listed. (New 5/99, Revised 4/03).