



Vegetable Gardening Tips

Growing Information for the Home Gardener Series



Cucumbers

Cucumber is a warm-season vegetable that yields a high return for the space it occupies. It is not uncommon for one plant to yield 30-40 fruit over a three- to four-week period. The fruit is a favorite component in salads and a favorite in pickling. Other crops that are fun to pickle include okra, carrots and watermelon rind. Cucumbers, like other members of the cucurbit family, produce separate male and female flowers on the same plant (see illustration). The female flower has the “immature cucumber” attached to its base. Pollen must be transferred from the male to the female flower to achieve fruit development. Attract pollinators to the garden by planting flowers in and around the garden space. Also, plant herbs, and allow them to flower.

The first flowers to develop early in the season are all male flowers; thus, no fruit sets on early flowering plants. About 7 to 10 days later, the female flowers also develop, and normal fruit set takes place. Plant breeders have developed “gynoecious” varieties that produce practically all female flowers. Each female flower is a potential fruit, and a more concentrated and earlier fruit set is obtained on gynoecious plants. Seed of a variety that produces both male and female flowers is mixed into the gynoecious seed pack by about 10 percent by the seed company. Doing so provides a source of pollen in the area. These seeds are usually color coded. Be sure to plant some of both varieties.

Gardeners in North Louisiana can plant cucumber seed or transplant from April to mid-May. A fall crop can be planted in early August. South Louisiana gardeners can plant seed from mid-March to mid-May. A fall crop is planted in late August in the south.

Varieties

Two general types of cucumbers are pickling and slicers. The pickling types produce short, blocky fruit with a tender skin that usually has more white coloration than the slicing types. The slicing types, used primarily for salads, are long, dark green, with a thick, tougher skin except for burpless kinds. The tougher skin makes them somewhat objectionable for pickling. Within these two types are white-spine and black-spine. The white-spine varieties have fruit that mature more slowly on the vine, so they can be allowed to stay on the vine longer without a rapid loss of quality. Seed companies offer many different varieties, but not all perform well in Louisiana. The varieties listed below have proved their adaptability to our growing conditions.

Slicing Types

Dasher II – a gynoecious, very dark green hybrid with good disease resistance (esp. mildew); vigorously produces medium-size, white-spine fruit.

Daytona – gynoecious vigorous vine with long, dark fruit.

Diva – AAS winner that is seedless and nonbitter.

Fanfare – AAS winner, semi-dwarf, monoecious hybrid that is disease resistant; produces large, dark green fruit.

General Lee – dark green hybrid with good production and good disease resistance.

Poinsett 76 – a dark green, smooth, open pollinating



variety that is well-rounded at both ends; has good resistance to downy and powdery mildew, anthracnose and angular leaf spot; spines are white.

Slice Master Select – an early improved gynoecious hybrid, tolerant to six diseases.

Speedway – dark green gynoecious hybrid especially good in the fall; produces quickly.

Sweet Success – AAS winner hybrid that is gynoecious, self-setting and mostly seedless; long, dark fruits with white spines are mild-flavored and burpless; good in greenhouse or gardens, especially if staked.

Thunder – extra-long, dark fruit on gynoecious vine; similar to Daytona.

Turbo – a long, blocky hybrid with white spines; very productive, but late.

Also good are Indy, Talladega, Sweet Slice, Rockingham, Intimidator and Stonewall.

Several bush types are available for containers and mini-gardens.

Pickling Types

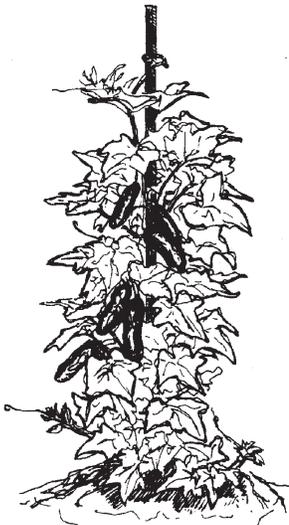
Calypso – dark green gynoecious hybrid producing white-spine, medium-large, blocky pickles.

Fancipak – medium, blocky fruit, producing high yields on gynoecious vines.

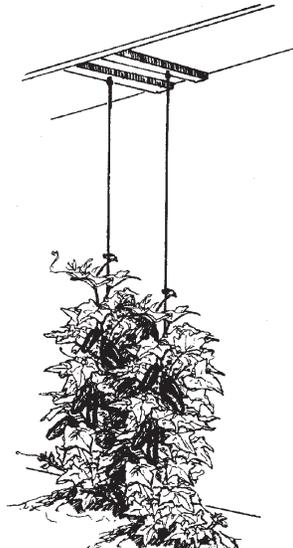
Jackson – dark, blocky, white spine fruit on short vines.

You can expect an ounce of cucumber seed to contain about 1,000 seeds.

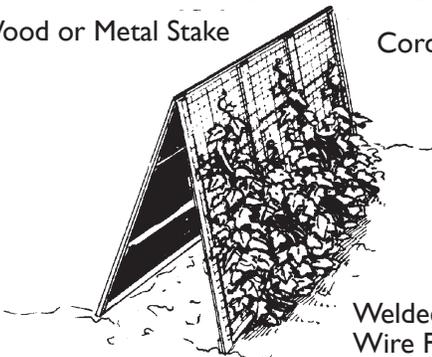
Trelling Systems



Wood or Metal Stake



Cord Supported Vines



Welded or Chicken Wire Frame

Cultural Practices

When selecting a site to plant cucumbers, choose a loose-textured, loamy soil that receives full sunlight most of the day. Good drainage is important for providing warm soils and good aeration. For best seed germination, soil temperatures should be 60-75° F. Plant seeds about 1/2 inch deep in 3- to 3 1/2-foot rows every 36 inches. When planting in hills, plant about four seeds per hill, and thin to two plants.

Prepare rows or hills a few weeks in advance. Work plenty of compost into the beds, or concentrate compost in the rows or underneath the hills. Apply about 15 lb. of a complete fertilizer like 13-13-13 per 1,000 sq. ft. (1-1.5 lb. per 20 ft. of row). When planting in hills, use 2 tablespoons of a complete fertilizer per hill as you develop the hills. Sidedress the hills with a teaspoon or two of calcium nitrate when the vines begin to run.

Cucumbers benefit from one sidedressing of 4lb. calcium nitrate per 1,000 sq. ft. (or 1/3 lb. per 20 ft. of row) when the vines begin to run and blooms set. Sandy soils may require a sidedressing of a complete fertilizer, which contains nitrogen, phosphorus and potassium.

Cucumbers take up a lot of garden space when allowed to run on the ground. A common practice is to grow cucumbers on a trellis or along a fence. They take up less garden space when grown in this manner and tend to make larger yields. The plants are much easier to spray or dust, and the fruit is held up off the ground, resulting in less fruit rot. You may have to help the plants attach themselves to the trellis at first, but once they catch hold, they usually very little assistance.

To maintain vigorous production, water soils deeply. Thorough flood irrigation is best because it saturates deeply, keeps excessive moisture off the leaves and does not wash off pesticides. Drought-stressed cucumbers develop bitter fruit whose ends tend to be slender and pointed. This bitterness is located just under the skin and can often be peeled away. Some cucumber varieties are available that are not bitter.

Production will cease even if a few fruits are left to mature on the vine. Therefore, keep the vines well-picked to maintain vigorous production, even if it means help from a neighbor. The pickling types are harvested when the young fruits are 2 to 6 inches long and about 1/2 to 2 inches in diameter. The slicing types are harvested when fruits are about 6 to 8 inches long and 1/2 to 2 inches in diameter, longer for European or burpless types. In any case, remove all fruit before the white areas in the skin begin to turn yellow and seed begin to mature.

Pest Control

Proper maintenance of cucumbers will help deter or lessen pest problems. Properly space cucumbers, and provide them with fertilizer and water to maximize growth. When using pesticides, wait the recommended time between application and harvesting. Since cucumbers depend on bees for pollination, apply insecticides in the early evening so bees are not injured.

Weeds

Growing cucumbers on black plastic mulch is very effective in larger home gardens. Black plastic mulch helps warm the soil in the early spring and also reduces problems with belly rot and controls most weeds around the plants. In smaller home gardens, organic mulches such as pine straw, leaves and hay are effective only when applied in dense mats. A recommended minimum mulch layer is 3 inches. Since cucumbers are sensitive to herbicides, shallow cultivation during the developmental stages is best. Grasses such as crabgrass and bermudagrass can be controlled after they emerge with the active ingredient sethoxydim (Poast, Hi-Yield Grass Killer) without injuring the cucumbers. Unfortunately, no herbicides are available to control broadleaves once they emerge.

Insects

Cucumber beetles feed on foliage and inoculate plants with bacteria wilt. Use products with a pyrethroid as the active ingredient to control this insect.

Aphids also feed on foliage, usually the undersides. Aphids secrete a sticky residue that allows black mold to grow in plants. This sugary secretion also attracts ants to the garden. Control aphids with horticultural soaps.

Whiteflies can be a problem in cucumbers that are covered or those that are spaced too close together. Whiteflies can be controlled using products containing imidacloprid but completely eliminating the crop is most often needed to completely control whitefly populations.

Diseases

Angular leaf spot is a bacterial disease that attacks leaves, stems and fruit during warm, wet periods of weather. Small water-soaked spots first appear on the underside of the leaves. These develop into straw-tan or brown spots with angular shapes bounded by the leaf veins. These spots may be surrounded by a yellow halo. Often, the centers of the spots fall out giving the leaf a tattered appearance. The disease is mechanically spread by insects, hand or splashing rain. Fixed copper sprays can slow its spread. Stay out of the garden while foliage is wet, and plant recommended resistant varieties.



Bacterial wilt is usually brought in by the cucumber beetle. Infected vines suddenly wilt and die. To control this wilt, control the beetles. Clean up debris at the end of the season to discourage carryover of insects and pathogens.

Downy mildew is caused by a fungal-like microorganism and occurs during periods of moderate to warm, wet weather. Leaves show small, angular yellow spots on the upper surface and often produce a visible grayish, moldy growth on the lower surface, especially during periods of high humidity. Use copper fungicides for prevention.

Anthracnose attacks older leaves in warm, wet weather, producing large, reddish-brown, circular spots. These spots eventually lose their centers. Streaks may develop on stems or pinkish, oozing lesions may develop on the fruit. Use chlorothalonil to manage anthracnose.

Powdery mildew is a fungal disease that produce white talcum-like powdery growth on the upper leaf surface. Infection starts on the lower leaves and then progress upwards. Disease development is favored by dry conditions, but high relative humidity is required for infection and spore survival. Plant cucumbers in sunny locations with good air movement. Protect the plants with sprays of potassium bicarbonate, sulfur or other contact fungicides.

Cucumbers are susceptible to several plant virus diseases, such as cucumber mosaic, tomato ringspot, watermelon mosaic and zucchini yellow mosaic disease. Symptoms of plant viruses mainly constitute stunting of plants, mosaic and mottling of leaves and leaf deformation. Management practices include removing weeds, which harbor both insects and plant viruses; managing insects with natural or synthetic insecticides or horticultural oils; and removing and discarding diseased plants.

Authors

Kathryn Fontenot, Assistant Professor (School of Plant, Environmental and Soil Sciences)

Mary Sexton, Extension Associate (School of Plant, Environmental and Soil Sciences)

Raj Singh, Assistant Professor (Department of Plant Pathology and Crop Physiology)

Sebe Brown, Assistant Area Agent (NE Region)

Ron Strahan, Associate Professor (School of Plant, Environmental and Soil Sciences)

Thomas J. Koske (Retired)

Visit our website: www.LSUAgCenter.com

William B. Richardson, LSU Vice President for Agriculture, Louisiana State University Agricultural Center
Louisiana Agricultural Experiment Station, Louisiana Cooperative Extension Service
LSU College of Agriculture

Pub 1981 (online only) Rev. 04/17

The LSU AgCenter and LSU provide equal opportunities in programs and employment.