

Okra

Okra (*Abelmoschus esculentus*) is a warm-season crop grown in home gardens throughout South Carolina. It is a tall, upright plant with a hibiscus-like flower. The immature, young seed pods are the edible part of this plant.

Planting

Okra grows best at temperatures between 75 and 90 °F and should not be planted in the spring before the soil temperature is about 65 °F at the 4-inch depth. The optimum soil temperature for seed germination is 70 to 95 °F. The crop can be grown on all soil types, although sandy loam soils high in organic matter are the most desirable. It is important that the soil be well-drained. Plant in full sun for best productivity.

Planting Dates

Area	Spring	Fall
Piedmont	May 1-15	June 15-30
Central	April 10-30	June 15-30
Coastal	April 1-20	June 15-30

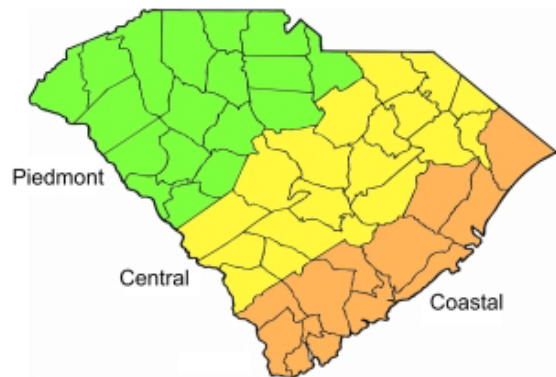
Many gardeners soak the seed before planting to improve germination. This may help; however, seedling death may still occur if the seed is planted in cold soil. Freezing the seed before planting is the best method to improve germination because this breaks the hard seed coat.

Plant okra in rows 3 to 6 feet apart with 9 to 12 inches between seeds in the row. Plant okra about ¾ inch deep.

Recommended Cultivars

- Clemson Spineless 80
- Lee
- Annie Oakley II
- Cajun Delight.

South Carolina Gardening Regions



Piedmont: Abbeville, Anderson, Cherokee, Chester, Edgefield, Fairfield, Greenville, Greenwood, Lancaster, Laurens, McCormick, Newberry, Oconee, Pickens, Saluda, Spartanburg, Union and York counties.

Central: Aiken, Allendale, Bamberg, Barnwell, Calhoun, Chesterfield, Clarendon, Darlington, Dillon, Florence, Kershaw, Lee, Lexington, Marion, Marlboro, Orangeburg, Richland and Sumter counties.

Coastal: Beaufort, Berkeley, Charleston, Colleton, Dorchester, Georgetown, Hampton, Horry, Jasper and Williamsburg counties.

Fertilizing

A soil test is always the best method of determining the fertilization needs of the crop. Information on soil testing is available in [HGIC 1652, Soil Testing](#).

Follow the results of a soil test to maintain a [soil pH](#) between 5.8 and 6.5 and optimal fertility levels. If a soil test has not been taken, apply 5-10-15 or 6-12-12 before planting and as a sidedress. Okra tends to respond to a high phosphate fertilizer. The okra plant has a sensitive balance between vegetation (leaf production) and reproduction (pod production). The use of additional nitrogen should be avoided on vigorous plantings until fruiting begins to check plant growth. Two or more sidedressings with a high analysis nitrogen material may be needed, however, depending on rainfall. It

is important to supply additional nitrogen late in the season at the time the "forms" or "blooms" are concentrated in the top of the plant.

Watering

Water the garden to provide a uniform moisture supply to the crop. The garden should be watered in the morning so that the foliage is dry before dark. Water the garden sufficiently to moisten the soil to a depth of 6 inches. Light sprinklings will encourage shallow rooting of the plants. The critical period for moisture is during pod set and pod development.

Cultural Practices

Weed control is important in this crop, especially when the plants are small. Cultivation and use of organic mulches are the best methods for weed control. Cultivation should be shallow to prevent damage to the roots of the crop. Organic mulches (2- to 3-inch layer) conserve moisture as well as control weeds.

Harvest & Storage

Okra should be ready to harvest about 60 to 70 days after planting when pods are 2 to 3 inches long. At this stage the pods are still tender. Larger okra pods will tend to be tough and fibrous. Round-podded okra varieties remain tender at larger pod sizes and are good to use for slicing and freezing.

Okra grows very fast; therefore, it must be harvested every two days. Do not allow pods to mature on the plant because this will inhibit more pods from developing and reduce total productivity of the plant. Handle okra carefully because the pods bruise easily.

The optimum conditions for storing okra are a moist environment and temperatures of 45 to 50 °F. Okra can be stored in the refrigerator for about seven days.

Problems

Root-decaying diseases, which result in the death of the young seedlings, are the most serious disease

problems in this crop. They are more prevalent when the crop is planted in cold, wet soil. Rotting of small pods after the flowers drop is a fairly common problem with okra. Planting the crop in full sun and providing good air movement through the planting will help to reduce the problem. Proper plant spacing will also help to minimize this problem. The exact cause of this disorder is not known. Small bumps sometimes develop on the pod. This damage is not caused by the stink bug. The cause of these small bumps is not known.

Root-knot nematodes can be a serious problem on okra. If a plant is stunted, pull the plant out of the ground and check for galls on the roots. These galls are caused by the nematodes, which are microscopic worms. An effective nematode control program should include crop rotation and sanitation. More information about controlling nematodes in the home garden is available in [HGIC 2216, Root-Knot Nematodes in the Vegetable Garden](#).

Crops should be rotated to help reduce disease and nematode problems. Okra plantings should not follow vine crop plantings such as squash or sweet potatoes.

Insect problems that may be encountered include aphids, corn earworm and stink bug. Corn earworms will eat into the pods. Stink bugs will cause the pods to be twisted and distorted.

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

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