Summer Squash

Planting
Summer squash (Cucurbita pepo) is a warm-season crop that grows best at average temperatures between 65 and 75 °F. Squash seeds do not germinate well in cold soil. In the spring, do not plant this crop until after the last chance of frost has passed and the soil temperature at the 4-inch depth is 60 °F.

Squash may be grown on black polyethylene mulch. To plant the squash seed, punch a small hole in the plastic and plant. Black polyethylene mulch warms the soil faster in the spring and conserves soil moisture, which usually will result in an earlier harvest. Other advantages of this type of mulch are weed control and reduction of fruit rot. It is best to use drip irrigation in conjunction with the black polyethylene mulch. Use this mulch only for the spring crop. If the fall crop is grown on polyethylene mulch, paint the mulch white.

For early squash, use a row cover either alone or in combination with black plastic mulch. The row cover can be either clear polyethylene sheeting supported by wire hoops or one of the spun bonded polyester materials that need no support above the developing plants. Remove these materials before the temperatures get above 75 °F, or high temperature under the row covers may inhibit the growth of the plant.

Plant squash in full sun in rows spaced 3 feet apart. Plant the seeds ½ inch deep and 4 to 6 inches apart in the row. When the plants are in the one to two true-leaf stage, thin the plants to 12 to 15 inches apart, selecting the most vigorous seedlings.

Squash can also be planted in hills. Rows should be spaced 4 to 6 feet apart, with hills 3 to 4 feet apart within the row. Place two or three seeds in each hill.

**Planting Dates**

<table>
<thead>
<tr>
<th>Area</th>
<th>Spring</th>
<th>Fall</th>
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<tbody>
<tr>
<td>Piedmont</td>
<td>April 15-May 15</td>
<td>July 1-20</td>
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<tr>
<td>Central</td>
<td>April 1-20</td>
<td>August 1-15</td>
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<tr>
<td>Coastal</td>
<td>March 20-April 10</td>
<td>August 10-25</td>
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**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.

**Recommended Cultivars**
Summer squash includes yellow (straight and crookneck), zucchini and scallop. Some varieties have a bush-type of growth instead of the vining habit, which is useful if your garden is small.
Cultivars recommended for home gardens in South Carolina are:
- Yellow Straightneck - Saffron, Seneca Butterbar
- Yellow Crookneck - Dixie, Multipik
- Zucchini - Embassy, Spineless Beauty
- Scallop - Sunburst

**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, make a preplant application of 5-10-10 fertilizer at 3 pounds per 100 square feet. Sidedress before the vines start to develop using 33-0-0 at 1 pound per 100 feet of row or calcium nitrate at 2 pounds per 100 feet of row. More frequent sidedressing may be required if the garden is sandy or if leaching rains occur. Do not overfertilize with nitrogen because this encourages excess vine growth and reduces fruit growth.

**Watering**
Water the garden to provide a uniform moisture supply to the crop. The garden should be watered in the morning so 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 fruit set and fruit development.

**Cultural Practices**
A common problem with summer squash is the rotting of the blossom end of the fruit, called blossom-end rot. The main symptom is a dark-colored dry rot of the blossom end of the fruit. Blossom-end rot is caused by a lack of calcium in the developing fruit. It may be an indication that calcium is lacking in the soil or that the plant does not have the ability to take up adequate amounts of calcium from the soil. The following measures will help prevent blossom-end rot:
- Test the soil and apply the recommended amount of lime before planting.
- Mulch with 2 to 3 inches of materials such as grass clippings, pine straw and leaves.

Mulching prevents rapid soil drying and allows roots to take up available calcium efficiently.
- Do not overfertilize plants with nitrogen or potash. Excessive amounts of these nutrients depress the uptake of calcium.
- Water plants during extended dry periods.
- Add organic matter to the soil. This will help "loosen" clay soils and will improve the waterholding capacity of sandy soils. In either soil, organic matter will increase plant uptake of water and calcium.
- Grow squash in raised beds to improve drainage. (Do not grow squash in raised beds in the sandy Central region.)

Squash have separate male and female flowers on the same plant, and pollen must be transferred from the male flowers to the female flowers by bees. Poor pollination can result in improperly shaped fruit. Observe plants closely when blooming begins to determine if bees are present. Use insecticides late in the evening to prevent killing bees.

**Harvesting & Storage**
Summer squash can be harvested about 55 days after planting. For optimum quality, harvest while fruits are tender and still have a shiny or glossy appearance. When growing conditions are favorable, harvest the crop daily or every other day. Harvest crookneck and straightneck varieties when fruit is 1½ to 2 inches in diameter. Harvest zucchini when fruit is 7 to 8 inches long and scallop types when they are 3 to 4 inches in diameter. Do not leave large fruit of summer squash on the plant because this will inhibit the development of additional fruit. Store summer squash in the refrigerator.

**Problems**
Insect problems include spotted cucumber beetles, striped cucumber beetles, pickleworms, squash vine borers, aphids and squash bugs. Aphids are a major problem because they can transmit viruses to the plants. Squash vine borers can cause total collapse of the plant. Plant early because squash vine borers and pickleworms are problems later in the season. Common disease problems include powdery mildew and viruses.

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