Southern Peas

Southern peas, black-eyed peas and field peas are all names for the crop known worldwide as cowpeas (*Vigna unguiculata* ssp. *unguiculata*). Cowpeas probably originated in Africa and were introduced to the United States during early colonial times. They quickly became a staple crop in the Southeast. This member of the legume family, which is actually a bean and not a pea, produces a very nutritious crop of seeds that can be shelled and eaten fresh, processed in the green stage or allowed to dry on the vine for a dried product. Most varieties of Southern peas produce their own nitrogen in root nodules making them good choices for soil-building summer crops.

### Planting Dates

<table>
<thead>
<tr>
<th>Area</th>
<th>Spring</th>
<th>Fall</th>
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<tbody>
<tr>
<td>Piedmont</td>
<td>May 1-June 30</td>
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<tr>
<td>Central</td>
<td>Apr. 10-Apr. 30</td>
<td>June 20-June 30</td>
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<tr>
<td>Coastal</td>
<td>Mar. 25-Apr. 15</td>
<td>Aug 1-Aug 10</td>
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### Planting

Southern peas are a warm-season crop requiring warm soil temperature (at least 60 °F) for the best germination and emergence. Many pests and diseases will plague Southern peas planted into cool soils. Four to six seeds per foot of row should be planted three-quarters to 1 1/2 inches deep in rows 20 to 42 inches apart. The older vining-type cultivars of Southern peas should be planted with only one to two seeds per foot of row. Control weeds early in the season with shallow cultivation. Later the peas will shade out most weeds. Avoid cultivation after the plants begin to bloom.

Southern peas are self-pollinating. Insects as well as wind are responsible for moving the pollen to achieve fertilization. Care should be taken when spraying for insect pests to avoid damage to pollinating insects.

### Types of Cultivars

There are four types of peas:

- **Field Pea**: Robust, viny type usually with smaller seeds that produce a dark liquid when cooked.
- **Crowder Pea**: Starchy seeded types "crowded" into the pods, normally cooking up dark.
- **Cream Pea**: Smaller plant type with light colored seeds that cook up light.
- "**Black-eyed**" Pea: Intermediate in its plant type and seed cooking characteristics.

### Cultivars

- **Field**: 'Iron/Clay,' various heirlooms
- **Crowder**: 'Carolina,' 'Colussus 80'
- **Cream**: 'Zipper Cream,' 'Carolina Cream'
- **Black-eye type**: 'Pinkeye Purple Hull,' 'Dixielee,' 'Santee Early Pinkeye'
Soil
Southern peas will produce an adequate crop on most soils but will perform better on fertile soils. Particularly heavy or wet soils should be avoided. When necessary, add organic matter and provide drainage to wet or heavy soils.

In soils where Southern peas haven't been grown before, improve nodule formation and nitrogen fixation with inoculation of the proper pea strain of the Rhizobium bacterium. Avoid soils infested with root-knot nematodes unless a resistant variety is used. Soil pH should be 5.8 to 6.3. Have the soil tested several months prior to planting and adjust soil pH according to recommendations.

Fertilizing
A soil test is always the best method for determining the fertilization needs of crop. Information on soil testing is available in the fact sheet HGIC 1652, Soil Testing.

If a soil test has not been taken, fertilize Southern peas sparingly with 2 to 3 pounds of 5-10-10 fertilizer per 100 feet of row. The fertilizer can be applied seven to 10 days before planting or added in a band 3 to 4 inches deep and 2 to 3 inches from the seed. High fertility (primarily residual nitrogen from previous crops) will produce excessive vine growth with poor seed yields.

Watering
Irrigation is normally not necessary. Southern peas are renowned for their ability to grow and produce under harsh conditions.

Harvest & Storage
Southern peas are ready to be harvested as soon as the pods can be easily shelled. This is normally when the individual seeds begin to swell in the pod but before many pods begin to lighten in color and dry out.

Southern peas vary in maturity dates from around 65 to 125 days. Experience is a good teacher for determining the proper picking time. Some people like to use a few immature pods broken into the pot as "snaps." Only the youngest and most tender pods should be used in this fashion. Fresh pea pods are very perishable and should be quickly moved to a shady area and spread out to avoid spoilage by heat. The harvested product should be shelled and processed rapidly.

Problems
Several insect pests will feed on Southern peas. One of the worst in some parts of the state is the cowpea curculio. This small, black weevil feeds in the early part of the summer on the developing pods and later lays its eggs in the developing seeds of the Southern pea. Aphids can infest pea plantings causing yield loss as well as transmitting virus diseases. Stink bugs and leaf-footed bugs can become severe pests in the late season. Lesser cornstalk borers can devastate a late planting of peas especially during dry weather. This pest feeds by boring into the stems of young seedlings causing stand loss.

Although many diseases affect peas, few are very severe. Fusarium wilt can damage non-resistant varieties as can root-knot nematodes. Fusarium wilt causes extensive yellowing of the foliage with little pod production and eventually death. Athelia rolfsii, the causal agent of Southern stem blight, will affect peas, often causing death of individual plants. It can be recognized by the prominent white mold near the base of the plant.

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