



Champaign County Juvenile Detention Center Master Gardener Community Garden

Peas Lesson

Time

15 – 30 minutes

Overview

Peas are a common and popular cool season garden vegetable. This lesson explores the pea plant.

Objectives

Students will:

- Discover the different types of peas.
- Understand how to plant, care for, and harvest peas.
- Learn about the nutritional value of peas and how to prepare them in tasty ways.

Supplies

- Garden peas, snap peas, snow peas

Snack

- Peas for tasting
- Vegetables from the garden
- Ranch dressing
- Juice/water

Activity

Planting, harvesting, and tending peas

Tasting various types of peas

Sources

<http://www.urbanext.illinois.edu/veggies>

<http://www.usagardener.com>

Peas

DO: Begin by introducing yourself and the other Master Gardeners by first names.

SAY: Good afternoon. We are a group of Master Gardeners of Champaign County here to provide a gardening program today at JDC. In the fall and winter months we come every other week to give a lesson on plants, eating right, and taking care of the planet. In the spring and summer we work together with you to plant and maintain a vegetable and flower garden in the outside rec area. (depending on time... I became interested in gardening because... Does anyone else have gardening experience or a relative who gardens?)

Today's lesson will be... I am... with other volunteers... (introduce themselves).
(Participants may introduce themselves also.)

Today we are going to talk about a popular garden vegetable, peas.

Peas are frost-hardy, cool-season vegetables that can be grown throughout most of the United States, wherever a cool season of sufficient duration exists. For gardening purposes, peas may be classified as garden peas (English peas), snap peas, and snow peas.

Garden pea varieties have smooth or wrinkled seeds. The wrinkled-seeded varieties are generally sweeter and usually preferred for home use. The smooth-seeded varieties tend to have more starch than the wrinkled-seeded varieties. The smooth-seeded types are used more often to produce ripe seeds that are used like dry beans and to make split-pea soup.

Snap peas have been developed from garden peas to have low-fiber pods that can be snapped and eaten along with the immature peas inside.

Snow peas are meant to be harvested as flat, tender pods before the peas inside develop at all.

The Southern pea (cowpea) is an entirely different warm-season vegetable that is planted and grown in the same manner as beans

When to Plant

As peas can prefer cool growing conditions and will tolerate light frosts, they may be planted as soon as the ground can be worked and will germinate in a wide range of soil temperatures, 4-24°C (40-75°F). Plantings of heat-tolerant varieties can be made in midsummer to late summer, to mature during cool fall days. Allow more days to the first killing frost than the listed number of days to maturity because cool fall days do not speed development of the crop as do the long, bright days of late spring.

Spacing & Depth

Sow pea seed 1 to 1½” deep, 1-2 inches apart in double rows spaced 3-6” apart, 24” between the next double row. Pea plants will tolerate crowding so may be spaced 2” apart. Pea seed is available in both treated and untreated; if using untreated pea seeds, avoid planting in cold, wet, poorly aerated soils, as you risk losing the seed to rot.

Care

Peas prefer full sun to partial shade with and require a well-drained, rich and sandy soil. Work organic matter, including rotted manure or compost into the soil for best results. Even soil moisture is essential especially during flowering and pod set. Use mulch to conserve moisture and keep weeds down around your peas. All peas, including dwarf types, are natural climbers, will be more productive and not as susceptible to rot, if given some support or planted along a fence or trellis.

Companion Planting

Peas do well with Carrot, celery, corn, cucumber, eggplant, early potato, radish, spinach, pepper, and turnip.

Harvesting

When the pea pods are swollen (appear round) they are ready to be picked. Pick a few pods every day or two near harvest time to determine when the peas are at the proper stage for eating. For best tasting peas, harvest as pods become plump, but are still young and tender. Pick peas regularly to promote continued production.

When you pick, is partially personal preference. If you prefer small, sweet peas, pick early. Experiment with it until you find which size and flavor you prefer. Peas should be picked immediately before cooking because their quality, especially sweetness (like that of sweet corn), deteriorates rapidly. The pods on the lower portion of the plant mature earliest. The last harvest (usually the third) is made about one week after the first. Pulling the entire plant for the last harvest makes picking easier.

Pea pods can be stored in a plastic bag in the refrigerator for two weeks. Unlike fresh green peas, pea pods deteriorate only slightly in quality when stored. Peas freeze beautifully if they are fresh. Fresh frozen peas do not need to be cooked upon thawing. Just add to soups, stews or heat briefly before serving.

Common Problems

The first signs of fusarium wilt and root-rot disease are the yellowing and wilting of the lower leaves and stunting of the plants. Infection of older plants usually results in the plants producing only a few poorly filled pods. These diseases are not as prevalent on well-drained soils. Beds amended with abundant organic matter can greatly improve soil aeration and drainage. Fusarium wilt can be avoided by growing wilt-resistant varieties.

Nutritional Value & Health Benefits

Green garden peas are a valuable source of protein, iron and fiber. Fiber helps to reduce serum cholesterol thus reducing the risk of heart disease and stroke. Sugar snap peas and

the like, contain much less protein, but they are an excellent source of iron and vitamin C that work to keep your immune system functioning properly.

Preparation & Serving

Wash garden peas just before shelling. To shell, pinch off the ends and pull the string down on the inside of the pod and pop the peas out. Wash edible pod peas and trim both ends. Remove the string from both sides of the pod. Cook briefly or serve raw. Steam, sauté, or stir-fry peas quickly to retain the bright green color and vitamin C content. Vitamin C is easily destroyed by over cooking.