

Growing Field Peas for Forage

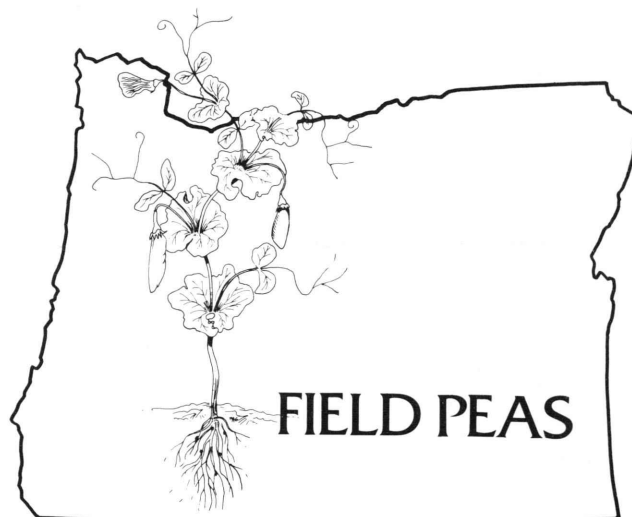
Area of Adaption

Field peas (*Pisum sativa* subsp. *arvense*) are used most often as a winter annual in the south and as a summer annual in the north. They are well adapted to the conditions of western Oregon and western Washington. Peas do well on a variety of soils, but they are best adapted to clay soils and alluvial bottom areas.

Peas and oats provide one of the best silage crops for the north coast area of Oregon and those south coast areas where it is still not warm enough for corn to be grown successfully.

Primary use

Field peas are grown for grain, hay, silage, and as a cover or green manure crop. As a forage, peas usually are grown with a small grain, most often with oats. Peas also can be used as a crop to be harvested by turning livestock into the field. Peas are a highly productive annual legume and are suitable to most types of tillable lands west of the Cascade Mountains. Field peas are easy to grow and produce a highly palatable forage.



Establishment

Field peas can be sown in the fall in western Oregon. When they are grown with oats, 90 to 120 lbs of peas and 50 lbs of oats are sown per acre. If peas are sown alone, increase the planting rate to 140 lbs per acre. Seed of field peas is difficult to cover if you use broadcast methods. Drilling methods are preferred to assure a uniform depth and rate of seeding. When seed is drilled with a grain drill into a well-prepared, moist seedbed, 90 lbs of seed per acre is sufficient.

In eastern Oregon, at higher elevations with 20 inches or more of precipitation, peas and oats should be spring-planted for a hay or silage crop. On irrigated land, however, peas are used only as a "catch crop" with another crop planted in July or August to make more economical use of the land. Turnips frequently are sown by air into areas previously used for peas.

Fertility and pH requirements

Properly inoculated peas will not require N fertilization because of the nitrogen provided symbiotically by nitrogen fixation. Be sure to obtain the proper *Rhizobium* species for peas; all *Rhizobium* are all not alike and will not work interchangeably. Consult Extension Circular 1055 for more information on inoculation, nodulation, and N₂ fixation.

Varieties

Feed-type pea varieties include Austrian Winter and Fenn. Austrian Winter has been the most widely used cultivar in the south because of its winter hardiness when planted in the fall. Fenn was developed by the University of Idaho and released in 1971. It is winter hardy and moderately resistant to gray stem canker (*Ascochyta caulicola*). This variety, because of its disease resistance, is expected to replace Austrian Winter in the South.

Edible-type pea varieties (EFB33, Garfield, Latch, Melrose, and Pacer) are less winter hardy (and thus are sown in spring) and are seldom used for forage.



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You can determine phosphorus and potassium requirements of field peas by soil testing. Specific recommendations based upon soil test data are provided in OSU Fertilizer Guide 30.

If soil test data are not available, an application of 60 lbs P_2O_5 (26 lbs P), 80 lbs of K_2O (66 lbs K), and 30 lbs of sulfur should provide adequate nutrients for a highly productive field pea crop.

A pH of 5.7 or greater is suggested for annual legumes. The amount of lime required to raise the soil pH to 5.7 will depend upon the soil type and buffering capacity. An SMP buffer test will provide the necessary information to determine liming needs when used with OSU Fertilizer Guide 30. Always apply lime several weeks prior to seeding to allow time for the limestone to change the soil pH value.

Management

Fall- or early spring-planted peas and oats are ready to cut for green feed in mid-July. Peas and oats are ready to be cut for hay when pods are about half formed or when the oats are in the soft dough stage. When used for silage, the oats should be in the hard dough stage. Cutting peas and oats to short lengths and making sure the material is well packed with just enough moisture present to exclude air (60 to 70% moisture) will assure a high quality silage.

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