

## Growing Peas for the Canning Factory

By GEO. E. STARR

A large acreage in Michigan is given over to the growing of peas for the canning factory. This crop is usually grown under contract at a stated price. By such an arrangement, the price is assured and does not fluctuate within the season. This eliminates one crop risk and assures a profit to the grower who economically produces a large yield.

The pea crop matures early in the season and furnishes a quick cash return. It is a crop which takes comparatively little labor to produce up to time of harvest. As it matures early in the season, it is often possible to produce a second crop after a crop of peas has been harvested. The roots are left in the soil at harvest time and increase the amount of available nitrogen for the use of succeeding crops. Much of the crop may be returned to the farm to be used as feed and later returned to the land for soil improvement purposes. Pea vine silage made from the fresh vine and pods put directly into the silo is superior, pound for pound, to corn silage and is a good roughage to feed dairy cattle. About 80 per cent of the total crop is composed of vines and pods.

The pea crop may take a place in a rotation which might otherwise be occupied with less profitable crops. Many farmers seed clover or other legume crops with peas in preference to the use of oats or barley, as nurse crops. On very heavy soil, this practice is not always to be recommended for should there be a very heavy rainfall after the peas are planted and if the ground should become crusted it might be necessary to go over the field with some implement which will break the crust to enable the young pea seedlings to push through more readily.

As the pea crop is harvested in an immature stage and is taken at once to the viner station, there is little or no hazard in harvesting the crop as there is little possibility of rain or frost damage such as threaten many of the farm crops. This is an important consideration.

One of the most important advantages in growing a crop of canner peas is that it puts the soil in excellent condition to follow with a planting of wheat. Statistics obtained by the Cornell Experiment Station indicate that there is a considerable increase in yield of wheat if

**MICHIGAN STATE COLLEGE**  
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**R. J. Baldwin, Director**

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planted after a crop of peas. According to estimates by farmers on a large number of farms, the increase is as follows:

Yield after peas over yield after oats—5.5 bushels an acre.

Yield after peas over yield after barley—4.0 bushels an acre.

Yield after peas over yield after beans—3.7 bushels an acre.

Individual cases have been reported in which the increase in yield after peas over yield after other grain crops has been as much as 15 bushels an acre.

### How to Grow the Crop

**Soils and Soil Preparation**—Select a loam, silt loam or clay loam, which is well supplied with humus and lime, well drained, and retentive of moisture. Plow deeply in the fall and fit thoroughly early in the spring. Prepare a fine, well settled seed bed in order to promote a more rapid and uniform germination.

**Fertilizer, Manure, and Lime**—Apply 200 to 250 pounds of a high grade complete mixture such as 4-8-6 or 4-12-4 with a drill at the time seed is planted. If the soil is very fertile, a 2-16-2 or 2-12-6 or some similar formula high in phosphorus may be substituted for the 4-8-6 mixture. Top dress with lime if the soil is acid, using amounts which soil tests indicate may be needed. Apply this after plowing and mix thoroughly with the soil when fitting the field for the pea crop. If manure be used for peas, apply it in the fall before plowing. Use well rotted manure.

**Planting Seed**—Plant with a grain drill, using four bushels of seed per acre. If more than this amount of seed is used, drill one-half of the seed in one direction of the field and cross drill the balance. Plant the seed at a depth of two to three inches, depending upon type of soil used. The lighter the soil the deeper the seed may be planted. Extremely deep planting encourages the development of root rots. Roll the field after planting in order to insure even germination of seed and greater ease in harvesting.

**Seed**—Use good seed of high germination, well bred, of good yielding quality, true to type of variety, uniform in season of maturing, and free from seed borne disease. It is customary for the canning company to supply the seed to the grower. The canner as well as the grower is interested in securing the best seed that it is possible to obtain. A number of the leading canners are producing a large portion of their own seed in order to be certain that it may possess the necessary qualifications.

**Date of Planting**—Plant early in the spring as soon as the soil is properly fitted and weather conditions may permit. Planting time may depend somewhat on the canner's needs as he may wish to spread the maturing of the pea crop over the normal canning period. The pea is a cool weather crop. A delay of ten days at planting time may cut down the yield as much as 50 per cent.

**Varieties**—Plant varieties which are adapted to the soil and to the canner's use. The list of varieties used in Michigan includes the following sorts: Alaska, Cannors' Perfection, Horsford's Market Garden, Admiral, and Rice's No. 13.

The Alaska is a smooth seeded early maturing variety. In common with other smooth seeded varieties, it is somewhat more hardy than

the wrinkled seeded sorts and may be planted earlier. On good soil, it produces a vine 30 inches tall which makes it easy to harvest. As it is the first variety to mature it is usually out of the way before the rush of other farm work.

The Cannery's Perfection is a wrinkled seeded sort which ranks as a second early. It produces a vine about 30 inches long and is usually very productive.

The Horsford's Market Garden is a trifle later than Perfection. It has a wrinkled seed and usually produces a good crop of high quality peas.

The Admiral variety has a wrinkled seed and ranks as one of the latest of the canning sorts. It produces a long vine with medium length pod.

The Rice's No. 13 variety has a wrinkled seed. It ranks with the later maturing sorts and is usually very productive.

Harvesting—Harvest the pea crop when it is at exactly the proper stage of maturity. If the crop becomes over ripe, many of the peas become hard and the quality of the pack is low. If the crop is harvested too soon, the yield is low and the immature peas are lacking in quality. It is customary for the field man from the canning factory to notify the grower when the peas are ready for harvesting. His directions should be followed with promptness, as a day's delay may seriously injure the quality of the crop, with consequent loss to the grower and canner.

Use an ordinary mowing machine equipped with pea guards and lifters. If, in addition, a set of windrowers is attached to the machine, the labor of harvesting is very much lessened.

Yield—The average yield of shelled peas should be a ton or more per acre. Under favorable conditions it is not unusual for this crop to produce up to two and-half tons per acre. The price paid to the grower varies somewhat with the variety but the gross returns per acre will probably average much the same no matter which variety may be grown. Many growers plant two or more varieties in order to secure a longer harvesting season.

