

The Pea Crop in Central Otago

WITH the difficulties arising through restricted shipping, new crops are being grown on our farms to produce the seed which is either in short supply or unprocurable from abroad. Crops of turnips, mustard, radish, beans, and peas have been produced in some areas this season for the first time.

The pea crop is the most common of the above group and although it has been fairly extensively grown in this country for many years a number of farmers in Central Otago are now trying it as a new venture.

Peas, apart from their considerable cash value are an excellent and valuable crop in rotation with wheat, as being legumes they increase the soil fertility by their action of converting atmospheric nitrogen into nitrates, part of which are left in the soil. Nitrogen is a valuable factor in the production of wheat.

Varieties of Peas

Peas do best on free loams and medium to gravelly soils rather than heavy tight soils, although under suitable conditions of light rainfall or good drainage, heavy soils will produce excellent crops. Peas can be grouped in the following four classes:—

1. **Garden peas** used mainly for garden crops.
2. **Blue Prussian** used mainly as a boiling pea.
3. **White Ivory** used principally for split pea trade.
4. **Partridge** used mainly for stock food either as a pure crop for feeding off in the late summer or autumn, sown with oats for a hay crop, or threshed and fed as grain.

Since New Zealand is well suited for pea growing a good export trade has been developed in the above varieties.

The garden peas are the most exacting in their soil requirements to obtain good crops. The medium to heavy well-drained soils are best suited to them where the rainfall is not too heavy, or the lighter soils where the rainfall is sufficient to keep the crop growing through the summer.

The White Ivory and Blue Prussian have a slightly wider range of soil types and good crops can be obtained under lighter soil conditions than that required for the garden varieties.

The Partridge is the most adaptable of all the classes and can be successfully grown on even the lighter wheat and barley land. It produces heavy yields, although the price received for it is usually less than that obtained for either White Ivory, Prussian Blue, or Garden varieties.

At present anyone contemplating growing peas would be well advised to obtain a contract from one of the seed or mercantile firms before sowing, as with the present shipping situation it may be difficult to dispose of a crop.

Method of Sowing

All these classes of peas are grown in Central Otago and the area could be further extended with advantage in all the grain-growing districts. Sowing is carried out in the late spring on well-worked land. Stubble land, ploughed in the autumn, left open to the winter frost and worked down in the spring will produce a good seed bed. Sowing is at the rate of three to four bushels per acre for all types. Garden varieties are usually sown at four bushels and the others at three bushels upwards as experience indicates. Cross drilling is often resorted to, partly to get the four bushels sown though mainly to obtain better spacing of the seed and a more even covering of the ground. Rolling of the paddock as a final operation after drilling is advantageous in that a good even surface of the ground is obtained for later cutting of the crop.

Fertilizer

The application of 1cwt. of superphosphate sown with the seed is a useful addition to assist the yield. As with other legumes lime should be applied to the land if the acidity of the soil is at all high, although generally speaking Central Otago soils are not in great need of lime.

Harvesting

The method of harvesting determines the stage at which the crop is cut. When there is some handling of the crop at time of cutting (such as mow-



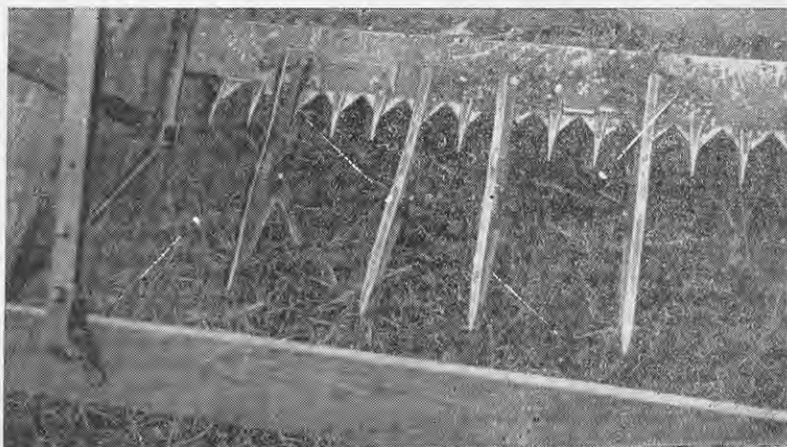
A 46-bushel crop of garden peas after being direct headed.

ing and raking into windrows or when a windrowing device, attached behind the mower, rolls the cut haulms clear of the horses or tractors for the next cut round the paddock), the crop is cut when the peas are firm, the pods still retain some of their green colour and the haulms are not completely withered or dried up.

When cut on the green side like this there is no loss through the pods opening. Garden peas may be cut on an even greener side while the pods are mottled, creamy-green colour and very little wilting of the haulms is showing. This produces a good green appearance of the seed which is favoured by the "Trade."

A non-wrinkled type of pea seed such as the Partridge has to be fairly ripe before cutting or some shrivelling of the sample will show up, whereas with garden types which are naturally wrinkled, cutting on the green side does not affect the sample.

If the crop is lodged or partly so (which frequently happens) the attachment of about four to six special pea fingers on to the ordinary knife fingers will lift up the haulms sufficiently for the mower knife to make a good job of the cutting.



Pea fingers attached to fingers on platform of header.