Wheat.

The total quantity of wheat sealed and tagged fell from 16,000 bushels in 1929–30 to 4,060 bushels in 1930–31. This decrease may be attributed to two causes: first, the adoption of set standards for the 1930–31 field inspections, and the resultant rejection of 80 per cent. of the areas entered; and, secondly, to the fact that for the first time the Wheat Research Institute did not purchase and resell the wheat. This left merchants free to buy on the market, and many delayed purchasing their requirements till late in the season, by which time some of the certified wheat had been sold for milling purposes.

The effect of this high standard for field inspection is apparent in the results of the current season's field inspections, as may be seen in the accompanying figures:—

	1930–31.	1931–32.
Areas entered	136	62
Areas passed	27	46
	=20 per cent.	=74 per cent.

This improvement in the quality of areas entered in 1931–32 is a reflection of standards adopted during 1930–31.

White Clover.

A total of 30 tons of white clover seed was certified under the class "old pasture" in the 1930–31 season as compared with 35½ tons for 1929–30. There was a big decrease in the acreage entered for white clover certification alone, but this was partly counterbalanced by an increase in the amount of seed which was derived from the dressings of certified rye-grass from old pasture.

In the 1931–32 season a commencement has been made to certify white clover on a "type" basis. Samples from a number of areas have been tested by the Agrostologist, and those accepted have been grouped into "mother seed" areas and "permanent pasture" areas. Only a very few of these areas are being harvested this season, so that little certified white clover will be available.

Cocksfoot.

The certification of cocksfoot under the classes "mother seed" and "permanent pasture" has been introduced this season. In the meantime, practically all the areas are confined to the Akaroa Peninsula. The certification of the Peninsula seed is being undertaken by the Department in co-operation with the Banks Peninsula Cocksfoot Seed-growers' Association.

Beans.

As a result of the operations in Marlborough during the 1930–31 season, 1,000 bushels of machine-dressed seed beans were sealed and tagged as being the produce of crops in which no bean-wilt could be found.

Montgomery Red Clover and Kentish Wild White Clover.

A few areas throughout New Zealand have been sown down with imported lines of the above types of clovers. The system of certification adopted enables the genuineness of the seed to be maintained, a matter of great importance.

2. SEED PRODUCTION.

Government Pure Seed Station, Lincoln.

The special strains of seeds produced by the station have up to the present been grown at the Ashburton Experimental Farm. This farm was closed down in June, 1931, and arrangements were then made by the Department to lease from the Canterbury Agricultural College, Lincoln, an area of approximately 50 acres. This small farm has been designated the Government Pure Seed Station, Lincoln. It is established for the very definite purpose of producing productive seed for distribution. In this varietal or strain purity and freedom from disease are the main considerations.

The work of necessity entails a certain amount of plant selection, yield trials in connection therewith, and variety trials, the objective being the production of small nucleus lots of seed for distribution to approved growers or to merchants who are growing seeds on contract. Field crops at present being dealt with are potatoes, wheat, barley, linseed, and garden and field peas.

3. MISCELLANEOUS.

Rape.

It is generally stated by farmers that there is considerable variation in the yield and fattening-quality of lines of rape. No investigations have ever been carried out with the object of defining the various types, and the purpose of this investigation is to study these variations.

In 1930 samples were collected from merchants in all parts of New Zealand. All but two or three lines were imported. Samples were sown in the spring of 1930 and later the seedlings transplanted 30 in. apart each way to afford individual plant study.

Apart from a few lots that were mixed, it was found possible to place each line into one of the following classes:—

Type 1: A tall upright giant form. Leaves not numerous, leaf stalks thick, and crown open. As growth advances a central stem is produced from which arise a few lateral branches reaching a height of about 18 in. The type embraces a wide range of variation, more particularly in leaf character.

Type 2 is characterized by the production of numerous leaves, forming a dense crown. The plant is short, and forms a short stem upon which in due course are produced a large number of lateral shoots. The leaves are smaller and of a darker green than the average type 1. There appears to be very little variation within the type.

Type 3 is a flat spreading plant with dark bluish-green and much dissected leaves. Occasionally the crown is dense, but usually the leaves are few and the crown open.

The behaviour of these types in the trials may be summarized as follows:—

Type 1 gives the greatest initial bulk of fodder, but does not recover after cutting as readily as type 2.