

## FERTILIZERS

*Rationing.* Although the total quantity of rock phosphate imported during the year showed a substantial increase over the tonnage imported during the same period last year, it has still been necessary to retain the rationing scheme. Some degree of relief has, however, been possible, and although the basic ration has remained at 28 per cent. of the average annual quantity of fertilizer used during the two-year period ended 31st May, 1941, the following additional quantities have been made available:—

- (1) An extra 1 cwt. for each dairy cow milked this season;
- (2) An additional allocation for each of the principal fodder crops, such as turnips, swedes, rape, mangels, and chou moellier;
- (3) Additional quantities granted as a result of reopening the appeal procedure.

Special provisions continue to exist for returned servicemen to be allocated a supply of fertilizer upon application to the Secretaries of District Councils of Primary Production.

*Importations.* Materials such as muriate of potash and sulphate of ammonia continue to be imported in small quantities. Sulphate of potash is at present unprocurable except for tobacco-growing, where its use is imperative.

*Clarendon Phosphate.*—During the year operations on the higher-grade phosphate undertaken by the British Phosphate Commissioners ceased after extracting a total of 7,489 tons. Investigational and quarrying operations on the low-grade phosphate (10–12 per cent.  $P_2O_5$ ) were continued, and a total of approximately 22,000 tons of this material was extracted.

*Organic Fertilizer.*—The continuation of the policy of growing large quantities of vegetables for supply both locally and to the Armed Forces in the Pacific has made it necessary to institute control over the distribution of organic fertilizers.

*Official Samples.*—A further 110 official samples of fertilizers have been taken and analysed. In addition, a considerable number of samples suspected of being valuable fertilizers have been reported on.

## SEED CERTIFICATION

The activities associated with the Department's scheme of seed certification continue to expand, and increased quantities of certified seeds are being produced each year. A feature of the season's activities has been the inclusion in the list of certified seeds for the first time of the new strain of ryegrass developed by the Plant Research Bureau and released under the description "H1 ryegrass."

Increased demands from overseas are being received for locally grown grass and clover seeds, particular emphasis being placed on certified lines. As the supplies of seed of pedigree strain are increased, so these are given greater prominence in the certification scheme. As a result, the following quantities of seed certified from the 1940 harvest were identified as of pedigree origin:—

Perennial rye-grass	..	..	..	..	..	160,000 bushels.
Italian rye-grass	..	..	..	..	..	20,000 bushels.
Cocksfoot	..	..	..	..	..	70,000 lb.
White clover	..	..	..	..	..	25,000 lb.
Red clover	..	..	..	..	..	30,000 lb.

Similar developments are taking place in respect of crop seeds. All the wheat now accepted for certification is of reslected origin, with the result that whereas previously rejections on account of foreign varieties or high loose smut were numerous, last season not one crop was rejected for either of these reasons.

*Contract Growing of Seeds.*—As a prerequisite to the inclusion in the certification scheme of seeds of pedigree or selected origin, it has been necessary to develop a system of contract growing of the material produced by the Plant Research Bureau. This process is essential in order that the stocks of any particular line may be multiplied up to a quantity which will permit of satisfactory distribution throughout the seed-producing areas.

Commencing with perennial rye-grass and white clover in 1935, contract growing has now been extended to a stage where the following seeds were being produced in 1945: perennial rye-grass, Italian rye-grass, H1 rye-grass, white clover, Montgomery red clover, broad red clover, lucerne, oats, sweet lupins, field peas, linseed.

All seeds produced under contract by the Department are distributed to the best advantage either—as in the case of grasses and clovers—under certification to the farming community generally or—as exemplified by linseed—to a limited organization capable of making the best use of the material available.

*Supervision of Seed Production.*—In addition to any supervision of seed production given as an adjunct of the certification scheme generally, particular supervision is given to the production locally of the Dominion's requirements of rape, turnip, swede, chou moellier, and kale seeds. The production of all these has developed as an outcome of war conditions, but the results have shown that, given proper supervision, seeds of quality can be produced in New Zealand, thus opening the way to the establishment of a post-war activity in brassica seed production.

*Linen Flax.*—Officers of the Fields Division have again in the 1944–45 season been responsible for obtaining suitable land for the growing of linen flax. They have contacted farmers and arranged contracts, supervised the sowing of the areas, organized the harvesting of the crops in the various districts, and given assistance in the valuation and stacking of the produce.