

Brown-top.—Applications for the certification of brown-top seed are not yet sufficiently numerous to permit of definite conclusions being drawn in regard to the acreage of this seed likely to be under certification in the current season. No great variation from last year's area of approximately 20,000 acres is anticipated, however.

Italian Rye-grass.—The returns for the certification of Italian rye-grass seed indicate that over 900 acres have been inspected. The number of rejections made during field inspection has been low, so that more seed should be available for sowing this year than has been the case in previous seasons.

Phalaris tuberosa.—The area of *Phalaris tuberosa* entered for certification has increased to over 100 acres, as compared with 40 acres in the 1937–38 season. Up to the present difficulty has been experienced in obtaining seed of high germinating-capacity, an experience which is not peculiar to New Zealand. A few really good seed yields have been obtained, but generally the combination of low yield and low germination of any seed harvested has not given encouragement to the growing of this pasture plant for seed purposes.

Subterranean Clover.—An area of 70 acres of subterranean clover was harvested for seed certification in the Marlborough District this season. While most of this clover-seed in the past has been imported from Australia, a certain quantity has been harvested from time to time in New Zealand. This is the first time, however, that certification has been applied to New-Zealand-grown subterranean-clover seed. The areas in question are producing seed of the mid-season (Mount Barker) type.

Seed Potatoes.—The acreage of the potato crop inspected for certification in the current season approximates 4,000 acres, of which it is estimated that three-quarters will receive the official endorsement of certification.

Varietal purity and freedom from the virus disease known as leaf-roll are being maintained in a very efficient manner through the agency of the seed-certification scheme. In regard to the group of virus diseases known generally as mosaics, while reasonably efficient work is being done, it has not been possible to attain the same high standard as in the case of leaf-roll. It is considered that this is due to the complicated nature and behaviour of this group of virus diseases, and one feels that more headway might be possible if time could be given to a closer study under controlled conditions of the diseases concerned. Nevertheless, the certification scheme is fulfilling a very useful function as evidenced by the figures of the Government Statistician, who estimates that in the average throughout New Zealand certified seed potatoes yield 25 per cent. better than uncertified.

Wheat.—Approximately 5,300 acres of wheat have been inspected for certification in the present season, of which 3,600 acres have been accepted subject to a satisfactory grain sample. While the area inspected closely approximates that inspected in the previous year, the area accepted shows an increase of over 500 acres, indicating generally a higher standard in the crops offered for inspection.

Oats.—The oat crop has been included in the certification scheme for the first time, 30 acres of crop sown out with selected material having been accepted for the production of certified seed. It is confidently anticipated that a rapid development in the certification of this seed will take place.

Rape.—Endeavours were made in the past season to increase considerably the acreage of rape sown for seed-production under certification. Adverse weather conditions caused several acres to be drowned out, and eventually only 60 acres (approximately half the acreage sown) were harvested for seed. In view of the demand for certified rape-seed, strenuous efforts are being made in the coming season to increase the quantity of seed produced, and to this end over 300 acres have already been established.

SEED-TESTING.

For the calendar year 1938 a total of 20,791 seed samples were worked for analysis and examination, this number representing an increase of 387 on the previous year's total.

As in previous years, the demands on the Seed-testing Station's services proved to be in excess of the Station's capacity, and as a result, in the early part of 1939, some delay and trade dislocation has occurred, and has been the subject of representation to the Department by both trade and farmer organizations. It is obvious that the Station no longer acts merely in an advisory capacity, but is, in fact, an essential unit in the Dominion's seed trade, and, as such, its services must synchronize with agricultural and trade activity, otherwise an almost complete hold-up of domestic wholesale and export business occurs at a time when free movement of stocks is essential. Recommendations aimed at rectifying the position are under consideration.

As is usual, the bulk of the routine work comprised purity analyses and germination tests, mainly of samples submitted by seed-merchants either on their own behalf or on behalf of seed-growers. The majority of retail farmer buyers appear to rely on the integrity of the seed-vendor in supplying seed of approved quality, and, in consequence, only a very small proportion of the samples received are submitted by farmer buyers. The following are the number of samples submitted to the standard tests:—

	Samples.					
Purity analyses	..	..	..	..	..	10,840
Germination tests	..	..	..	..	..	17,540
Ultra-violet-light examination	..	..	..	..	..	1,990
Picric-acid tests	..	..	..	..	..	1,425
Total	..	..	..	..	..	31,795

Expressed as individual tests, the working of these samples required over 96,000 separate examinations and analyses.