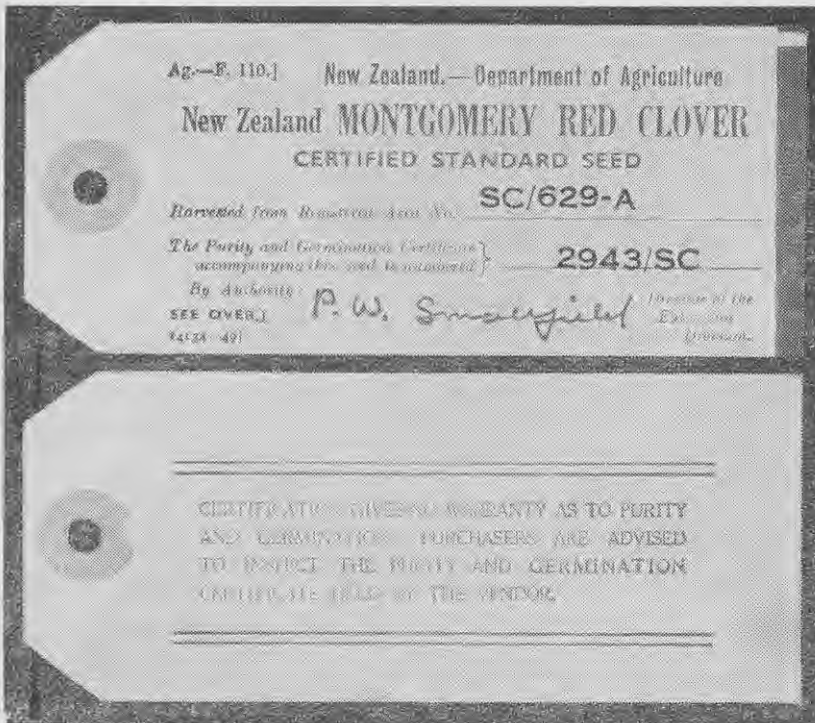


GRASS AND CLOVER SEED CERTIFICATION



Front and back views of a specimen of the tags which are attached to bags of Certified seed.

Short-rotation ryegrass: Only the certification scheme has made it possible to preserve with certainty the identity of short-rotation ryegrass.

White clover: When a laboratory test for white clover certification was first introduced in 1937 the total production amounted to 485 tons, of which 40 per cent. was accepted for certification. In 1947 production reached 2648 tons, yet, despite a higher certification standard, 70 per cent. of the crop was certified.

Montgomery red clover: This seed would not have been identifiable from cowgrass without a scheme, such as that provided by seed certification, under which it could be recognised.

There are other less obvious, though no less important, effects of the seed certification scheme. Before the certification scheme was introduced it was essential with perennial species, if quality was to be maintained, to harvest seed from old pastures. This uneconomic process can be eliminated under a certification scheme extending from a nucleus supply of seed derived from regularly-selected material of pedigree strain, and farmers have been able to take the fullest advantage of the heavier and cleaner seed crops harvested from younger pastures. The undesirable practice of saving seed from pastures of mixed ryegrass species has been almost entirely eliminated. Seed production under certification has become primarily an activity of the arable areas where crops and pastures are associated in the farming practice. The saving of seed, though not a primary activity on most farms, is nevertheless a planned one.

In general, the whole outlook on pasture seed harvesting has been lifted from that of a haphazard, catch-crop undertaking to be indulged in at the whim of the farmer and the season to that of an operation which warrants careful attention and planning. This change in the attitude to seed production, though perhaps affected to some extent by other factors, has been the result largely of the direct influence of the certification scheme.

Effect on Pastures

From the pasture aspect, also, certification has wrought some changes and pasture-management practices have had to be adjusted to obtain the best results from the improved strains. Though the farmer is the best judge of the improvement in quality of pastures due to the use of Certified seeds, it can be said that on some farms the use of Certified seeds has revolutionised farming practices. Nowhere is this more apparent than in Canterbury, where, instead of the run-out pastures or perhaps bare paddocks which demanded reploughing within three or four years of sowing down, good pastures can now be maintained for a number of years. The reduction in the acreage of arable crops in this district, though not perhaps a direct result of the use of Certified seeds, has been possible because pastures established with these seeds have not required such frequent renewal. Conversely, the increased grain yields obtained when pastures established with Certified seeds are broken up are a reflection of the increase in fertility which can be obtained through the heavier stocking possible on a good pasture.

That the United Kingdom gives preference to New Zealand Certified seeds and goes so far as to prohibit imports of uncertified seed of some species is additional evidence of the value to New Zealand of Certified seeds and of the certification scheme generally.

If a farmer buys Certified seed, however, he must not expect, automatically, perfection in all respects. Certification refers only to the strain of plant and gives no assurance as to the purity or germination of the seed certified.

Purity, or rather impurity, is a complex factor unrelated to strain and requires individual interpretation, depending upon the conditions under which the particular line of seed is to be sown; germination is a factor which can vary from one period to another in the one line of seed and it is materially affected by storage conditions. Neither of these factors can be incorporated satisfactorily in a certification scheme designed primarily to identify strain, but both can be determined by an analysis of a seed sample drawn at any time. As a matter of routine all lines of Certified seed are sampled by an official of the Department of Agriculture and examined for purity and germination, while every certification tag carries a warning to the purchaser to inspect the certificate of that analysis before completing the purchase of his seed. The certification tag is endorsed with the identity of the line of seed, the same identity appearing on the corresponding certificate of analysis covering the purity and germination of the seed. A certification insert slip is also included inside the sack, when the identity of the seed is an essential prerequisite to the future certification of an area sown with that seed.

The New Zealand certification scheme, introduced originally to identify seed of superior natural strains, has been modified to meet the different requirements of seed of pedigree strains. It is undertaken to provide the buyer with an assurance as to the strain of the seed and not for any specific benefit it may confer upon the grower of the seed.

The strains of grass and clover seed under certification have been selected for conditions in New Zealand, because New Zealand is still the biggest user of the seed it produces and it is only fortuitously that New Zealand strains may meet the needs of overseas countries also—that they do so is shown by the export seed trade, valued today at about £2,000,000. However, the scheme of seed certification takes its place in New Zealand agriculture essentially as an aid in lifting the production of animal foodstuffs to the highest level.

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