

GRASS AND CLOVER SEED CERTIFICATION

The quantity of Certified Government Stock seed released each year is regulated, as far as practicable, to an amount considered ample to enable the total New Zealand seed crop to be produced from that release within three further stages of multiplication. The demand for Government Stock seed is usually far in excess of the quantity available, but the demand is regarded as an economic one and is not in any way related to the real purpose of the release of this class of seed.

Improved Pedigree Strains

When an improved pedigree strain of any species is produced it is fed in at the top of the certification scheme as Certified Government Stock seed. From there it permeates into all classes of Certified seed and any radical change in procedure or classification of areas is thus unnecessary. In the intervening years the standard of the pedigree strain is maintained by annual release of re-selected material from the breeder.

With very few exceptions the strain purity of all Certified seeds, irrespective of class, is uniformly high. To that degree it is immaterial to the grazing farmer what class of Certified seed he sows, except that in some species he must purchase a higher class to be certain of obtaining seed of pedigree strain. The certification classes and their relationship are, however, of great importance to the seed grower, as they show the number of stages by which each class of seed is removed from the breeder and result in the most rapid multiplication to the stage where all Certified seed represents the latest possible release.

The procedure adopted has simplified the whole question of maintaining strain purity and has made it possible to eliminate age qualification, previously essential in certain species. Further, it has enabled a much higher general standard to be maintained in all Certified seed without the disturbing feature of a relatively high proportion of crops rejected from certification.



Samples of Certified white clover seed under plot test at Palmerston North.

The four recognised classes of Certified seed provide a clearly-defined channel of multiplication of the pedigree strain from the breeders' hands to the ultimate user. They do not necessarily represent seed of differing qualities; rather, they represent seed having a quality as even throughout as possible, and they indicate the stage of multiplication of the particular material. To that extent no tests could differentiate between, say, Italian ryegrass certified as Pedigree seed and much of that certified as Standard seed. The justification for the classes and the conditions of certification within them is that they permit rapid multiplication and correspondingly less opportunity for contamination during multiplication. In

addition, by a simple procedure, strains of most species at a certain stage removed from the original selection automatically pass outside the scope of the certification scheme.

The first and most obvious effect on farming of the availability of Certified grass and clover seeds has been that purchasers have been given an assurance that the seed they buy is of good strain. In addition a channel has been provided whereby the work of the plant breeder in developing pedigree strains is passed on to the farming community in a rapid and assured manner.

A knowledge of strain coupled with a knowledge of purity and germination of the seed has enabled a more accurate evaluation of the seed to be made, and buying and selling have been undertaken with more confidence. Though it is almost impossible to measure the effect of the scheme on individual species, a comparison of the position in regard to some species before the scheme was instituted and the position today is given below.

Perennial ryegrass: Before the introduction of the scheme 25 per cent. of the perennial ryegrass seed harvested might have been expected to reach the certification standard of the first years of certification. Today when a much higher standard applies 70 per cent. of the perennial ryegrass seed produced is actually certified, and it is not difficult to believe that the quality of much of the remainder is not far short of the present-day standard for certification.

Italian ryegrass: When certification was first introduced no local strains reached the standard of certification set. Today 70 per cent. of the harvest is recognised under certification. This is all of pedigree strain which is superior even to the imported strains which provided the first material to be certified.



Before leaving the paddock sacks containing Certified seed are branded and sealed to preserve the identity of the contents.