enabled the use of methods of production which were not previously possible without grave risk of deterioration in the types of the various species.

Coupled with the operation of this scheme, which was at first concerned only with superior strains developed under natural conditions, has been the work of the Grasslands Division of the Department of Scientific and Industrial Research, Palmerston North, in selecting by scientific methods improved strains of the main grass and clover seeds. Today the pedigree strains released by that division provide the basic material for seed coming under the certification scheme. This in turn has enabled the seed grower to take advantage of the increased seed yields associated with young pastures and to engage in the production of seed of superior strain, even though his farming programme does not permit the retention of individual areas in pasture for lengthy periods.

Purity and germination of the seed, like strain quality, are of greater importance than bushel weight and colour. Seeds of excellent appearance may nevertheless be dead, and the value of a line is in proportion to the viable seeds present. Impurities may consist of other crop seeds, of relatively unimportant or of serious weed seeds, and of inert matter, all of which affect the value of the seed comprising the bulk of the line.

Twenty-five years ago the Seed-testing Station of the Department of Agriculture handled about 10,000 samples a year; nowadays the number is about 40,000. That increase indicates not merely greater appreciation of a knowledge of the purity and germination of a line of seed, but also that the whole trade in pasture seeds is based on the purity and germination of each individual line.

Harvesting Methods

Many changes have taken place in farming practices generally during the past 25 years, and not the least have been those relating to the saving of grass and clover seeds. The introduction of the header harvester has revolutionised methods of seed harvesting and has led to the operation being carried out with a minimum of delay. Whereas older methods entailed transport of the crop to a stationary thresher and frequently necessitated stacking until a plant was available, most crops are now harvested by a header harvester following the swath left by the mower, and even in many cases by direct heading. In the wake of this development numerous problems have arisen which are exercising the mind and ingenuity of the seed grower.

Impurities of various kinds must be removed from all grass and clover seeds before the seeds are used. Improvements in machinery and the technique of seed-cleaning stores situated near centres of the industry have led to the production of better samples and reduced the loss of good seed to a minimum.