

SHORT ROTATION RYEGRASS IN THE SOUTHERN HALF OF. N O R T H I S L A N D

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In the short space of five minutes it is difficult to review the place of short-rotation ryegrass under the varied conditions of soils, climates, and types of farming which are to be found in the area to be covered, namely the land districts of Poverty Bay, Hawke's Bay, Wellington, and Taranaki. The opinions of the Instructors in Agriculture throughout the area as to the position in their districts was sought and this review is based on these opinions. It is interesting to note that while experience with short-rotation ryegrass in one or two districts extends back to 1942 in the majority, seed of this species has been sown only in the past two or three years, while in some localities as yet there has been no real experience with it. First of all let us have a look at the position of short-rotation ryegrass as it affects the farmer. This can best be done under two headings—seed production and in grazing pastures.

Seed Production

Experience with this strain for seed production is limited. A few areas were harvested in 1945/46 and in later years in the Manawatu and Rangitikei and in the Wairarapa and Poverty Bay. Given fertile, well-drained soils, the yields were satisfactory, but no big development in seed production is expected. In the Wairarapa, short-rotation ryegrass suffered severely after harvest in dry seasons, while in Poverty Bay, as with Hawke's Bay, perennial ryegrass seed growers have been very antagonistic to its introduction. In the Manawatu and Lower Rangitikei the conditions appear to be very favourable to the production of good seed crops and the strain appears to be capable of producing more than the one good seed crop. The strain is akin in many ways to the type of ryegrass which was prevalent in this area prior to certification. Yields of 35 to 40 bushels per acre have been recorded with second crops up to 35 bushels.

EXPERIENCE. IN PASTURES

Two main uses of short rotation ryegrass have developed. The first, as a constituent of permanent pastures when it is included in mixtures in quantities ranging from 5-20 lb per acre, the higher proportions being based on dairy farms of high fertility. The second use has been as the main grass species in special purpose pastures.

As a part of the pasture mixture short-rotation ryegrass has generally taken the place of Italian ryegrass in west coast districts and is looked on with increasing favour by dairy farmers and the fat lamb producers who are-renewing pastures with the plough. The late winter and early spring growth of this species is appreciated and the need for rather lenient grazing of pastures containing short-rotation ryegrass in the late spring and early summer, if it is to persist, is also being better appreciated. Many cases have been noted where short-rotation ryegrass has been eaten out of a sward within a year or two under soil conditions where it has persisted for upwards of six years under better management. Short rotation ryegrass is also being introduced by surface sowing after cultivation in dairying districts.

SPECIAL PURPOSE PASTURES

The high production dairy farmer, town milk supplier, and expert fat lamb producer are using short-rotation ryegrass for special purpose pastures for early spring grazing with considerable success. Areas of this type have been under observation for upwards of three years and there is no doubt about the early spring feed produced. White clover is favoured as the clover rather than red, which tends to smother the young short-rotation ryegrass in the autumn. A good clover is an essential to good production from short-rotation ryegrass.

While there is an abundance of favourable experience with short-rotation ryegrass in such districts as Taranaki, Wanganui, Manawatu, and southern Hawke's Bay, on ploughable country, the experience is not all so favourable in the Wairarapa, where excessive summer drying out appears to affect the life of the plant except under very careful management. There is not much use being made of the strain in central Hawke's Bay, Wairoa, or Poverty Bay, though in the last-named area the demand for seed in the past two

seasons has been increasing. There is little or no experience as yet with short-rotation ryegrass in inland high altitude districts, but it is being tried out.

POINTS FOR THE PLANT BREEDER REGARDING THE TYPE OF SHORT-ROTATION RYEGRASS REQUIRED

The strain of short-rotation. ryegrass at present available appears to be satisfactory, having the required, early growth, palatability, and vigour, and with the required fertility and management it appears to be sufficiently persistent. At the Marton area the original short-rotation ryegrass sowing of October, 1941; is still showing each spring a very satisfactory proportion of short-rotation ryegrass. No recommendations have come from instructors regarding lines for improvement in the type. Insofar, as this district is concerned a good job appears to have been done in the selections.