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## MASSEY AGRICULTURAL COLLEGE

NUTRITION EXPERIMENT (PASTURE GRAZING TRIALS)

## Mr. E. A. CLARKE

Manuring Trials.—The seventh year of this trial has now been completed and the results to date analysed. The main effect of the different manuring treatments on a basic rye-grass-white-clover sward has been on the carrying-capacity. The effect of lime is most marked and deterioration of the pastures in the control plots continues. In so far as thrift and productivity of ewes and lambs are concerned, there are still no measureable differences which can be attributed to manuring treatments.

The stocking of these plots with experimental sheep has been discontinued for the time being, but manuring treatments and careful pasture management with sheep are being continued. When treatment differences are more marked, restocking with experimental sheep can be undertaken.

Trials of the Carrying-capacity of Short-rotation Rye-grass (H1) Pedigree Rye-grass.—Pasture establishment on all plots has been excellent and production has been sustained at a high level. The considerably higher production of the short-rotation rye-grass pastures in the late winter and early spring of the first year has not been repeated this year. The pedigree rye-grass plots have since carried more stock at all times of the year, except for a short period during the late spring. The slight superiority of the short-rotation rye-grass pastures at this time may have been due to the exceptionally cold and wet conditions obtaining.

Differences between set stocked and rotationally grazed plots are still not clearly defined in terms of carrying-capacity, but a slight superiority has been noted in the quality and grading of the lambs off the set stocked plots.

Mutton and Wool Improvement (H. Goot).—The analysis of data accumulated by the fleece testing and recording department in the course of its progeny-testing work in commercial Romney Marsh stud flocks has been continued. The main object of these investigations is to obtain a real understanding of the problems confronting the breeder and the difficulties of fitting progeny tests into breeding practices, as well as testing certain sheep-recording systems.

The following papers have been published in the New Zealand Journal of Science and Technology:—

- "Hairiness in Wool—III: Growth of Hairiness in New Zealand Romney Marsh Lambs."
- "Hairiness in Wool—IV: Relationship between Fleece Hairiness and Fleece Weight in New Zealand Romney Marsh Sheep."
- "A Note on Progeny Testing."

## RESEARCH ON HAIRY SHEEP (N-TYPE)

## Dr. F. W. Dry

Further breeding experiments have advanced our knowledge of the inheritance of this hairy type. The studies of N-type, so extreme in character, with several features of ordinary sheep magnified, have added to our understanding of the fleeces of both hairy and non-hairy sheep.

With the aid of a special grant for fur-work, new-born skins were secured as trial furs, in view of their use for this purpose suggested by a New Zealand firm. Other firms are now interested in this development. The position is that fur is regarded as possibly giving support to the growing of carpet-wool.

During his visit to New Zealand early in 1946, Professor A. F. Barker emphasized the merits of N-type wool for carpet-manufacture. A New Zealand firm has made trial carpets and is proceeding to breed the sheep on a small scale. Interest in the use of the wool for carpet purposes has also been shown by the representatives of overseas firms.