

ANIMAL NUTRITION PROJECTS

Dr. C. R. BARNICOAT

Milk Yield of the Romney Ewe.—The milk yields of over 30 ewes from two groups of animals on the nutrition block were again determined, and the samples analysed. All lambs on the nutrition block are being weighed regularly to obtain information on the effect of twins, season, stage of lambing, &c., on growth rates.

Wear in Sheep's Teeth.—Visits were made to several ewe fairs and farms, and over 500 tagged sheep in the Taihape area (on twelve farms) were mouthed and recorded. Sheep were placed on peaty country (stated to carry soft grass) and on land at the college to obtain further information on the effects of toughness of grasses on wear of teeth. An apparatus was devised for measuring the breaking strain of grasses; different grasses are being compared, and their fibre contents estimated, as a preliminary experiment.

Over 100 tagged two-tooths on the soil erosion experimental area at Te Awa have been mouthed and recorded, and it is hoped that this experiment will show the effect on teeth wear of overstocking sheep on hill country. All sheep on the nutrition block were mouthed and photographed at intervals, and the rate of eruption and wear of teeth in 34 sheep was followed in detail by a new technique.

EXTENSION OF CHEVIOT SHEEP TRIALS

Professor G. S. PEREN and Mr. W. R. HEWITT

The Cast-for-age Cheviot Cross Ewe.—The work was continued satisfactorily, and data were collected on weight and quality of fleeces, weight and grades of lambs, and disposal of ewes. Many visits were made to breeders, farmers, and others using Cheviots. Although these visits have not yielded reliable experimental data, much of interest and value has been learnt. Farmer experience with Cheviots in the Taumarunui district is being closely watched since it will yield information on the ability of the Cheviot to thrive in a wet climate.

The Cast-for-age Cheviot Ewe: Comparison with the Romney.—The Cheviot cross experiment to investigate the comparative returns from cast-for-age half-bred Cheviot ewes when run with cast-for-age Romney crossbred ewes, both mated to the Southdown ram, was extended, and the ewes are being run on a nearby typical fat-lamb farm managed entirely by the farmer.

Comparison for several seasons are necessary before positive conclusions can be reached, but the results of the first year's trial may be summarized as follows: death-rates and percentage of dry ewes were similar in each group; lambing of the Cheviots (142 per cent.) was markedly above that for the Romney ewes (107 per cent.); the half-bred Cheviot ewes clipped about 2 lb. less wool; lambs from the half-bred Cheviot ewes were comparable in weight and grading with those from the Romney ewes. The half-bred Cheviot ewes fattened more readily than the Romney ewes in this dry season. It would seem from this season's tests and from past experience that the increased lambing percentage of the half-bred Cheviot is likely to be the most significant factor in determining any difference in total returns per ewe.

FARM DRAINAGE

Mr. A. W. HUDSON and Mr. G. HOPEWELL

Continuous records of outflows were obtained from experiments considered to be of further interest. Five new experiments were instituted, as follows: (1) comparison of the carrying-capacity and thrift of stock between an undrained area and a drained area; (2) comparison of efficiency of 2 in., 3 in., and 4 in. plugs in mole drainage; (3) effect of