

Ketosis in Pregnant Ewes: "Sleepy Sickness".—Two further trials of the dicalcic phosphate, potassium iodide, linseed meal salt-lick were made, one under field conditions at Shannon and the other under experimental conditions at Wallaceville. The farm at Shannon was the one on which encouraging results with the lick were first obtained in 1945. Again on this farm the lick proved effective in controlling ketosis in one group of 100 ewes, whereas in a similar group not fed lick a number of cases of ketosis occurred. At Wallaceville it was necessary to impose extreme conditions of feed restriction comparable to those resulting from falls of snow or silting over in pastures. Starvation for three to five days a fortnight before lambing did not cause fatal ketosis; most of the ewes so treated lambed prematurely and recovered. Starvation commenced three to four weeks before lambing caused fatal ketosis in the majority of multi-pregnant ewes. Feeding of lick under these severe conditions did not significantly reduce the incidence of ketosis.

Sheep Nutrition Projects

Comparison of Crops for Hogget Nutrition.—Observations have been continued at Manutuke on the comparative value of various crops for autumn feeding of hoggets. Thousand-headed kale and turnips have proved to be outstanding for the Poverty Bay district, as they can be grown in the driest years and provide a great bulk of very valuable fattening feed. In addition, kale is available during the whole of the period when facial eczema is likely to occur. The following table gives the comparative production for three seasons of the crops tried:—

PRODUCTION, IN LAMB-GRAZING DAYS

Crop.					1946.	1947.	1948.
Japanese millet	..	..	..	..	1,628	..	..
Rape	..	..	..	..	1,065	1,069	..
Turnips	..	..	..	..	1,435	2,490	2,129
Lupins	..	..	..	..	280	..	..
Chou moellier	..	..	..	..	859	..	..
Kale	..	..	..	..	2,274	2,641	2,097

In each year it has been possible to fatten lambs on turnips and kale during late summer and early autumn when pastures were very bare. In 1947, kale also provided useful winter feed during July after being spelled from the 21st May. Lucerne has been grazed extensively at Manutuke this year and has proved very valuable for providing grazing for large numbers of sheep during the autumn—for example, 1 acre which had been cut for hay on the 8th March provided grazing for 80 lambs from the 2nd to the 13th April, during which time they gained 2 lb.

Comparison of Various Pastures for Ewes and Lambs.—Trials with special pasture mixtures have been continued at Manutuke in 1-acre paddocks. The following broad conclusions can be drawn:

H1 Rye-grass and White Clover.—Provides good feed during winter and spring, but must be grazed leniently during summer to allow seeding. Under these conditions clover growth is very vigorous in summer and autumn, especially after the first year. Recovery of H1 rye-grass in autumn is slow, but it re-establishes very well from reseeding.

H1 Rye-grass, Cocksfoot, White Clover, Montgomery and Broad-leaf Red Clovers.—Under sheep-grazing the cocksfoot and red clovers are dominated by H1 rye-grass and white clover.