

*Top-dressing Old Pasture.*

This pasture was sown down in 1917. It was divided into five plots in 1921, the subsequent treatment being as follows:—

Plot No.	Top-dressing, per Acre.	Date of Application.	Top-dressing, per Acre.	Date of Application.
1	{ 10 cwt. slaked lime .. 2 cwt. superphosphate ..	19/8/21 7/9/21	5 cwt. burnt lime .. 2 cwt. superphosphate ..	2/6/22 31/8/22
2	Control (no dressing) ..	..	Control (no dressing) ..	..
3	2 cwt. superphosphate ..	7/9/21	2 cwt. superphosphate ..	31/8/22
4	4 cwt. Nauru rock phosphate	7/9/21	4 cwt. Nauru rock phosphate	31/8/22
5	1 cwt. blood, 1 cwt. super	7/9/21	1 cwt. blood, 1 cwt. super	31/8/22

Contrary to the previous season's experience, the effect of lime and manures was very noticeable during spring and early summer. The growth of white and suckling clover was remarkable, especially on the lime and super plot, where all previously vacant spaces were occupied by clovers. Similar spaces on the control plot were filled by hair-grass, moss, and hawkweed.

These plots were grazed in conjunction with an adjoining paddock of young rye-grass and red clover, and the sheep at first preferred the old top-dressed pasture. In subsequent grazings both pastures were about equally favoured, with the exception of the control plot on the old pasture, which remained practically untouched. Right through the season the line where the control meets the manured plots has been clearly defined, especially so by the amount of roughage which remained on it during the autumn and winter. It appears that the plot which received lime and superphosphate was most relished by stock.

*Temporary Pasture.*

[This consisted of two plots of 5 acres each—plot 1 being spring-sown with rape, and plot 2 autumn-sown after rape.

In the 1921-22 report it was stated that plot 2 showed the better sole of rye-grass, but plot 1 the better strike of clover. Plot 1 is now a much-improved pasture, considerable filling-in of rye-grass having taken place; the clover, however, is rather scanty. Plot 2 (autumn-sown) is better in this respect, particularly at the southern end, where the previous pasture contained a predominance of cocksfoot. This end of the pasture is apparently much relished by stock, all rye-grass, including heads, being closely cropped. The good stand of clover is probably accounted for by the heavy cocksfoot turf which was ploughed in, but that the incorporation of vegetable matter improves the palatability of a pasture has not previously been noted.

## COCKSFOOT-SEED PRODUCTION.

As related in a special note in the *Journal* for July, 1922, cocksfoot grown on the Danish system—in wide drills and intercultivated—has done exceptionally well on the Ashburton Farm. This area was closed in autumn (1922) after having been cultivated, and was again cultivated during August. The seed-crop was harvested on 26th December and threshed last month. The area of 2.4 acres yielded 490 lb. of seed,