

perennial crop lucerne, with its large power of producing, as compared with annual fodder crops, at a relatively low cost.

On rich dairying land, which is usually considered capable of close settlement by cultivation, the case is still worse for cropping. The best of the land of this description will grow upwards of 30 tons of grass per annum, and there are few annual forage crops on the same land which will exceed this yield of forage by as much as one-half; and even lucerne sinks in importance below the value of pasture under these circumstances.

In making this general statement on the economy of grass-farming, I do not lose sight of the fact that forage and root crops may have special values at special times. For example, while the average annual production of pasture is satisfactory on a cost basis as compared with crops, the growth of grass is not continuous; whereas for profitable dairy-farming it is of the highest importance to maintain the milk-flow at its highest possible level from the beginning to the end of the season. This cannot be done on grass alone, and if specially grown crops were not available at times the milk-yield would be checked and would fail to make a satisfactory recovery with the subsequent freshening of the grass. So also in the case of sheep, while comparatively cheaply provided grass must be our mainstay, it will always be expedient to resort to special crops for rapid fattening and to supplement pasture grazing at special periods of the year. In the cases cited from the Ruakura Farm, for example, the monthly stockings on rape and grass were as follows:—

Month.	Sheep per Acre per Month on	
	Grass.	Rape.
December	8.3	11.5
January	5.0	26.0
February	1.4	9.0
March	3.0	6.5

So far as the dairying and stock-raising industries are concerned, I think that a very small ratio of special-purpose crops to grass spells the highest economy and the greatest net profit under average farming conditions; but whether such a ratio as $3\frac{1}{2}$ per cent., the average of Taranaki, is one to be satisfied with is a more difficult matter to decide. The ratio must obviously vary according to the situation of the farm and the quality of the land. It would appear that only in the case of poor, light land should extensive cropping combined with treatment calculated to increase fertility be undertaken. In that case it would be warranted not as a permanent practice, but only for