

in March. The other paddock devoted to rape was of an entirely different class of soil—a strong loam—and had previously grown a very heavy crop of oats. It was twice ploughed during winter to a depth of 7 in., and afterwards rolled, twice double-disced, twice tine-harrowed and rolled, cultivated, and the seeds and manures sown during the first week in November. The double ridger was used as in the former paddock, the rows being 27 in. apart, to admit of horse-hoeing, which was several times done during the growth of the crop.

The rape was fit to feed off seven weeks after the date of sowing, at which time there was an excellent crop all over the field, the mustard on portions of the paddock reaching a height of 7 ft. Even in the driest of weather there was no trace of blight.

At the date of writing (29th March) the crop has been fed off four times, the fifth crop being reserved for ploughing under. This paddock has fattened off an average of fifty sheep and lambs to the acre.

In the manurial experiments the most notable feature is the good results from the “no-manure” plot, the yield from which is a record on this station. In my opinion this was due to the dressing of lime in 1911, the double ploughing, repeated deep cultivation previous to sowing the seed, and surface cultivation during the growth of the crop. It should also be remembered that this paddock is entirely different from the average poor swamp soil in the neighbourhood.

The following table gives the results of the manurial experiments:—

Plot.	Manures per Acre.	Tons per Acre.	Gain by Manure. Tons.
1	No manure	20.7	..
2	Seychelles Island guano, 2½ cwt.; basic slag, 2½ cwt.	35.0	14.3
3	Basic superphosphate, 5 cwt.	35.2	14.5
4	Superphosphate, 5 cwt.	33.6	12.9
5	Basic slag, 5 cwt.	32.5	11.8
6	Seychelles guano, 5 cwt.	27.9	7.2
7	Slag, 2 cwt.; superphosphate, 2 cwt.; steamed bones, 2 cwt.	37.5	16.8

It must be at once admitted that the above results lead to the conclusion that a slightly less quantity of manure would probably have given more profitable results; but such results were unlooked-for and could not have been foreseen by drawing conclusions from former experiments, and, as already pointed out, the soil is much better than the average soil of the farm.

With respect to the addition of mustard to the rape, its value as a corrective cannot be doubted, and in this instance, although some of the lambs were fed entirely on the crop for several weeks, there was no trace of swollen ears or other bad effects that usually arise from feeding on rape alone.