

latter. The Down also comes much earlier to maturity, although the experiment under discussion does not emphasize this so much as repeated experiments carried out at the Moumahaki Farm. Where it is not possible to fatten all the lambs I am of the opinion that the Border Leicester is the better cross, as it yields a good fleece and a heavy carcase later on; but for the purely early fat-lamb trade the Southdown is unsurpassed. Taking into consideration the fact that this is anything but good sheep-country, the results as shown above must be considered very satisfactory. During the season several first and second prizes were gained at the Waikato and Auckland shows for fat lambs.

It will be noticed that by the end of November 219 Southdown and 182 Border Leicester cross, or nearly two-thirds of the total number, were off hands, which result is undoubtedly due to the fact that sufficient feed in the form of mangels and rape was available at a critical season and was the means of keeping the lambs in a continually thriving condition. Where the ewe flock is renewed each year the advantage of early maturity cannot be overestimated—the risk of having the lambs left on hand as stores is avoided, the ewes being fat early in the season command a higher price, and, the land being freed, there is abundance of feed for the new ewe flock. To obtain the best results the ewes should be in good thriving condition before they are mated.

This season 800 crossbred ewes have been put to the rams, half to the Southdown and half to the Border Leicester.

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VEGETABLE HUMUS.—An interesting experiment is in progress at the Moumahaki Experimental Farm to test the plant-food value of different crops ploughed in as green manure. The field where the trial is being made carried an oat crop in the 1911–12 season. The stubble was disced, and the area, 15 acres, was apportioned out into four plots. On these, mustard, rape, buckwheat, and vetches were grown. It had been intended to plough in the whole of the four crops, but they made such vigorous growth, and the farm at the time was so heavily stocked, that the crops were partially eaten down. The remaining growth, of about 18 in. in height, was ploughed in, the whole area being then sown with ryecorn. In early spring this provided abundant feeding for ewes and lambs, and, being a crop that quickly recovers after grazing, a growth of about 2 ft. in height was soon made. This was ploughed in. The field was then sown in swedes, the seed being drilled. Careful note is being taken of the appearance of the crop on the different plots, and the rate of growth. It may appear that the ploughing-in of the ryecorn would to some extent nullify the test as to the respective merits of the first-ploughed-in crops, but it has to be remembered that the latter had ample time to decompose and be converted into plant-food, whereas the ryecorn was not sufficiently long in the ground to have any immediate appreciable effect.