## LUCERNE - CULTURE.

## A MOUMAHAKI FIELD.

Among the best-established and cleanest stands of lucerne in the Dominion is the area of some 15 acres at the Moumahaki Experimental Farm, known as Field No. 5. The accompanying photograph shows the field with the second cutting in progress last summer. The following particulars are supplied by Mr. T. W. Lonsdale, Manager of the Farm :-

The seed from which the lucerne crop was established was sown in November, 1913. The history of the field for the previous two years is, briefly, as follows: In 1911, following rape fed off with sheep, Algerian oats were sown, no manure being supplied with this crop. After harvesting the oats the stubble was disked, and a catch-crop of mustard, rape, buckwheat, and vetches was sown, the principal part of the crop being grazed and the residue ploughed under. Rye-corn was then sown, and manured with 3 cwt. of basic slag per acre. This crop was also grazed with ewes and lambs and the land again ploughed, and sown with swedes in December, 1912, 1 cwt. of basic slag, 1 cwt. Island phosphate, and 28 lb. muriate of potash per acre being applied with the seed. The swedes were carted off the land, after which vetches, 11 bushels, and barley, 1 bushel, per acre were sown in July, 1913. This crop was ploughed under early in October following, and immediately afterwards ground limestone, 15 cwt. per acre, was applied. The land was then worked down for lucerne, and a few days prior to sowing the seed 300 lb. per acre of soil taken from an established lucerne-field was applied and harrowed in. On the 14th November 13lb. of lucerneseed per acre was sown on a well-rolled surface, 4 cwt. basic slag and 1 cwt. sulphate of potash per acre being applied at the same time. Over the major portion of the field three varieties of lucerne were sown - namely, Colonial (Marlborough), Hunter River, and Tamworth. The yields from these three have been even throughout, and very little difference is noticeable in any respect. A smaller section of the field sown with the Dryland variety has given less even results, and has been marked by an exceptionally long dormant period. The first cutting, a light one, was made on the 14th January, 1914, since when seven crops have been