# FIELDS DIVISION.

# REPORT OF J. W. DEEM, DIRECTOR.

#### ARABLE CROPS.

Throughout the past season arable crops have done remarkably well, except in one or two districts where practically drought conditions prevailed. The yields obtained from the wheat and oat crops to date of writing are appreciably in excess of those obtained from such crops for the whole of the previous season

As regards the wheat crop, that portion threshed during the period January-March, 1933, gave an average yield of 38.52 bushels per acre, as against an actual yield for the 1931-32 season of 24.49 bushels. At the rate of 38.52 bushels per acre a total of 7,052,090 bushels of wheat had been procured during the January-March period. With the wheat crop still in stack, it is estimated that the production for the 1932-33 season will be more than sufficient to meet the Dominion's requirements, and there should be somewhere in the vicinity of 2,500,000 bushels available for export. It was estimated early in the season that a total area of 294,000 acres was sown to wheat in the 1932-33 season, as against an actual area of 271,939 acres harvested the previous year.

So far as oats are concerned, the position is just as satisfactory as it is with wheat. The estimated area sown to oats for 1932-33 was 407,000 acres, against an actual area harvested the previous season of 297,182 acres. Actual threshings for the January-March period disclose a per-acre yield of 48.52 bushels, as against an actual yield over the whole Dominion for the 1931-32 season of 41.03 bushels. The area from which oats were threshed for the five seasons ended with 1931-32 averaged 24.28 per cent. of the total area under that crop. Assuming that a similar proportion is threshed this year, the total yield of grain should be approximately 50 per cent. greater than that of the season 1931-32.

With regard to barley, it is estimated that 19,000 acres were sown for the 1932-33 season, as against an actual area harvested the previous season of 19,131 acres. As in the case of both wheat and oats, the yield per acre in the barley crop for 1932-33 is estimated to be several bushels per acre more than for the season 1931-32. The actual yield per acre for the latter season was 29.45 bushels, while the estimated yield for the 1932-33 season is 34.33 bushels per acre.

The area in potatoes in 1932-33 was estimated at 21,300 acres, as against an area in the previous season of 23,786 acres. It is anticipated that the yield that will be obtained from the potato crop for 1932-33 will be in excess of that obtained for the previous season, and after meeting Dominion requirements there should be an appreciable quantity available for export. It is hoped in this connection that satisfactory arrangements can be made with the Australian authorities to allow of the importation into Australia of New-Zealand-grown potatoes.

### ARTIFICIAL FERTILIZERS.

The top-dressing of pastures with artificial fertilizers, while still viewed by the farming community as one of the main features in pasture production, has been carried out to a lesser extent than had been expected during the season, almost entirely on account of the financial stress which has existed. The amount of artificial fertilizer actually delivered at officered railway-stations throughout the Dominion shows an increase of approximately 35,000 tons over that delivered for the 1931–32 season, and it is undoubtedly due to financial stress that this increase was not considerably greater. One knows that towards the end of the year large orders for artificial fertilizers for top-dressing purposes had to be reluctantly cancelled by farmers. Nevertheless, it is pleasing to know that the actual quantity used during the season did not show a decline on that used the previous season. The national wealth of the country is so bound up with its primary products that any falling-off in top-dressing is to be deprecated. One can only hope that conditions will improve to such an extent as will allow of farmers once more taking up whole-heartedly the top-dressing of their pastures.

## Instruction in Agriculture.

As reported in my last annual report, requests for advice on agricultural matters of all descriptions are exceedingly numerous, and are stimulated to an appreciable extent by the unusual conditions through which the country is at present passing. Our personal connection with the farming community has been continued and extended, but it is unfortunate that lack of finance, and the fact that many officers of the Division have for the major portion of the 1932–33 season had to devote considerable of their energies to Small Farm Plan work, has not enabled us to give personal advice to the fullest extent. Nevertheless, wherever personal calls have been impossible owing to the staff being fully employed, all inquiries have been promptly attended to by correspondence.

## EXPERIMENTAL FARMS AND AREAS.

Puwera.—As recommended in my last annual report, this farm was relinquished and handed back to the Lands Department at the end of the 1931-32 dairying season.

Marton.—Work on the Marton Experimental Area has, as in the last year or two, been confined almost entirely to work of an intensive technical nature, and has been conducted by the specialist officers engaged in grassland research work. The work carried on has consisted mainly of rye-grass strain trials, manurial trials, and the technique connected therewith. Full reports on the work at Marton during the year will be furnished later.