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FIELDS DIVISION.

REPORT OF J. W. DEEM, DIRECTOR.

ARABLE CROPS.

The season's cereal harvest has been below average, mainly on account of the unseasonable weather in the spring and early summer, and yields generally per acre show a decline in comparison with the previous season, particularly in respect of wheat. Actual figures are not yet available, but it is estimated that 234,500 acres of wheat were sown, as against an actual sowing of 257,873 acres in the previous season. Of this latter acreage 255,312 acres were actually harvested for threshing and yielded a total of 8,832,864 bushels, or 34.60 bushels per acre. The estimated Dominion average yield per acre for 1929–30 season is 30.56 bushels for approximately 7,100,000 bushels total yield. Actual threshings so far show that the yield per acre is 31.10 bushels, and at this yield 4,352,068 bushels have been secured up to the present. It is possible that the crop still remaining in stack will yield slightly above the estimated yield of 30.56 bushels per acre, and if such is the case the total estimated yield of 7,100,000 bushels will be exceeded by about 117,000 bushels.

So far as the oat crop is concerned, it was estimated that for 1929–30 275,000 acres were sown,

So far as the oat crop is concerned, it was estimated that for 1929–30 275,000 acres were sown, as compared with 267,739 acres actually harvested in 1928–29. Threshings so far average 41.76 bushels per acre. This is approximately the same yield as was obtained the previous season. The

position generally in respect of oats and oaten chaff is quite satisfactory.

In respect of barley, the percentage threshed for the five seasons ended 1928-29 was 98.23 of the total area under that crop. The estimated area sown in 1929-30 was 20,500 acres, and, assuming that a similar proportion is threshed this year, there should be ample barley to meet Dominion requirements.

The area in potatoes in 1929–30 was estimated at 22,600 acres, as against an actual area in the previous season of 21,304 acres. Basing the yield on the average yield per acre for the last five years, the total yield from the estimated area sown for 1929–30 should approximate 124,000 tons, as against 123,607 tons in the 1928–29 season. The quantity available will provide more than ample potatoes for the Dominion's requirements.

ARTIFICIAL FERTILIZERS AND FARM MANAGEMENT.

Top-dressing continues to be looked upon as the main feature in pasture-production, and the practice has become standardized throughout the Dominion generally. The most important factor in this connection is the proper utilization of the increased herbage produced. This calls for improved methods of grassland-management—a subject which is being given very great attention by farmers and officers of the Division.

Now that the use of artificial fertilizers is a recognized part of cultivation routine it is interesting to note the extent to which farmers are utilizing this aid to production. From information available it is ascertained that for the 1929–30 season 71·08 per cent. of the area in wheat, 60·17 per cent. of that in oats, 56·38 per cent. of that in barley, and 56·84 per cent. of that in potatoes have been treated with artificial fertilizers. These figures show an increase on the corresponding figures for the previous season. It seems reasonable to assume that the progressive movement shown in this instance is indicative of a trend which will be maintained in the future.

SECOND-GROWTH COUNTRY.

Experimental work on hill country, particularly in the Whangamomona County, which has been reverting to secondary growth, has been carried on, and the excellent results secured are being made use of over a wide area of country wherein the conditions are similar to those existing there. The demonstration farm being conducted in the Whangamomona County under the provisions of the Deteriorated Lands Act has been carried on throughout the year, and notwithstanding that it is being run partly on experimental lines the good work done by those responsible on the place has resulted in quite excellent returns being shown. The instructional officers of this Division continue to co-operate with the officers of the Lands Department in the work necessitated in connection with advances under the Deteriorated Lands Act, particularly in the back country of Taranaki and the King-country, and great improvement is shown. This is brought about chiefly by the use of fertilizers and subdivision. There are still 871 farms under supervision.

Instruction in Agriculture.

The instruction service has been strengthened by the appointment of several additional Instructors, but the demand for instruction and advice, coupled with the experimental work in progress, is now even more than the increased staff can satisfactorily cope with, and it is evident that the staff will have to be further strengthened from time to time as circumstances permit.

EXPERIMENTAL FARMS AND AREAS.

Puwera.—During the year this farm has been conducted as an ordinary dairy-farm, and experimental work has been restricted to investigations regarding the value of nitrogenous manures, observational phosphatic top-dressing plots, and rotational grazing.