

## EXPERIMENTAL STATION, LACOMBE, ALTA.

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### WEATHER CONDITIONS, 1913.

The seeding season opened on April 10. The weather during April and for the first ten days of May was both cool and dry, keeping growth in check. Afterwards, however, conditions were so favourable that by June 15 all crops on well prepared land were as far advanced as has been the case in any season since the establishment of the Station. Favourable weather continued until harvesting and threshing were concluded. Fair yields of grain of better than average quality were the rule.

### CROP YIELDS.

Banner and Abundance oats are the varieties grown in field operations. The yield, in 1913, was in favour of the Banner variety, which averaged 61 bushels per acre.

Marquis wheat has yielded at the rate of almost forty-five bushels per acre.

The yield of barley, from various causes, has been comparatively low, averaging only 37 bushels per acre.

Thirty-five acres seeded to peas and oats for fodder purposes produced 119 tons, the weights being taken when it was in fit condition for stacking. It is interesting to compare this yield with that secured from eighty-eight acres of timothy, from which there was produced slightly less than 111 tons.

Other crops grown for feed were turnips and corn. The yield of the latter was extremely small.

### ROTATION OF CROPS.

While it is rather early to draw definite conclusions as to the particular rotation best adapted to local conditions, it has been shown that a rotation which includes an application of barnyard manure and at least two years of hay or pasture will ensure heavier yields of grain, during the years these crops are grown in the rotation, than is possible where no rotation is followed other than continuous grain growing. Of the several under test the following two rotations seem best adapted to local conditions:—

#### ROTATION 'K' (SIX YEARS' DURATION.)

*First year.*—Hoed crop.

*Second year.*—Wheat.

*Third year.*—Oats or barley. Seeded down.

*Fourth year.*—Hay. Manured in autumn at rate of 12 tons per acre.

*Fifth year.*—Pasture.

*Sixth year.*—Pasture. Ploughed July after haying in preparation for hoed crop.