BARLEY.

Four varieties of six-row and three varieties of two-row were sown on May 1 at the rate of 2 bushels per acre.

The Binek Japan has given the best yields of the six-row varieties this season, but its dark grain and coarse straw will probably prevent this variety becoming popular. The O. A. C. No. 21 has given the best results in the three year averages and is a satisfactory variety for general use. The Manchurian is also to be recommended.

Of the two-rowed varieties Duckbill and Brewer have yielded very well for such a dry season. Duckbill has been under test for three years and has proven more productive than any of the six-row sorts.

PEAS.

Four varieties of peas were sown on May 1 at the rate of 2½ bushels per acre. They were harvested on August 18.

Chancellor has given the best returns for this season while Arthur has the highest average for three years. The latter is usually early with a fair length of vine and is to be recommended for this district.

SPRING RYE.

One plot of Ottawa Selected spring rye was sown on April 17 at the rate of 1½ bushels per acre. The crop was harvested August 6 and yielded 18 bushels and 32 pounds per acre.

FLAX.

Several plots of common flax were sown at different dates. The best returns were from the plot sown on May 15. This was harvested August 29 and yielded at the rate of six bushels and 24 pounds per acre.

EXPERIMENTAL STATION, LETHBRIDGE, ALBERTA.

W H. Fairfield, M.S., Superintendent.

SEASONAL NOTES.

On account of the excessive drought the season of 1914 has been, with the possible exception of 1910, when the area affected was more restricted, the most trying that has been experienced in Southern Alberta, since settlement has taken place. In regard to the amount of moisture carried in the soil from 1913 it might be said that the precipitation during the last four months of the year was light, amounting in all to only two and one-half inches. During this period heavy drying winds were prevalent with little or no snow on the ground so that the soil moisture was severely drawn upon. To counteract this in a measure, however, 3·63 inches of precipitation was received during the first three months of this year, so that the soil was reasonably moist and in excellent condition when work on the land was started.

The first discing, harrowing, or seeding on the Station occurred March 17. The ground froze up toward the latter part of March but opened up again shortly, and seeding became general from April 4. Unfortunately the rainfall during April, May, and until the latter part of June was very much less than usual. For this entire period no soaking rain was experienced, what did come was in the form of light showers that were not sufficient to wet through the dry layer of two or three inches at the surface and connect with the moisture lower down. The fact that the total precipitation for April was only 0·5 of an inch and for May 0·3 of an inch fully illustrates how serious conditions were, and how difficult it was to obtain a stand from seeds when sown. A wet spell during the last ten days of June revived things generally, but the dry, hot July was too severe a strain on plant life and the result was that there was a failure of all grain crops except those on summer-fallow.