

not as productive of grain as wheat, oats or barley. It is sometimes grown as a hay crop. It furnishes good pasturage but the quality of hay for general use is inferior to that of either oats or barley. No superior strains of spring rye have been developed as yet.

WINTER RYE.

Winter Rye promises much more in this province than spring rye. Northern grown winter varieties have proven perfectly hardy at Saskatoon, and in many other portions of the province. Eastern and southern grown sorts were almost completely killed out in the winter of 1910-11, but a more or less acclimatised variety, "*Saskatchewan Rye*," withstood the same winter perfectly. This rye has produced from twenty to forty bushels per acre on fallowed land in Saskatoon each year since 1911.

Winter Rye as a forage crop, furnishes earlier pasturage than any other crop. On June 17, 1914, winter rye at the College of Agriculture was headed out and measured 40 inches in height. It was ripe that year on the 18th of July. In areas subject to soil drifting or where wild oats are prevalent, this crop should be found useful either for early pasturage (for cattle, sheep or hogs), for hay, or even for the threshed grain. *North Dakota No. 959*, and *Saskatchewan Rye* are the leading varieties.

FLAX.

The *Brown Seeded, Purple Blossomed* type of flax has been found better suited than any other to the soil and climatic conditions of the province. The *Golden Seeded* type is later, shorter in the straw, and poorer in yield, but said to be richer in oil than the brown seeded type. No *White Flowering* sorts have yet produced as satisfactory yields as the *Purple Blossomed* ones.

The variety of the *Purple Blossomed, Brown Seeded* type that is best known and most productive is *Minnesota No. 25* or *Premost*, a pedigreed sort produced by the Minnesota Experiment Station. Another good variety but less productive is *North Dakota No. 155*. Other strains produced by the North Dakota Experiment Station and said to be resistant to flax wilt are *North Dakota No. 52*, *North Dakota No. 73*, and *North Dakota No. 144*. It is not claimed that the last three mentioned are heavy producers on undiseased soil. They have, however, demonstrated their usefulness on the flax sick soil of North Dakota.

The two chief difficulties in growing flax for seed in Saskatchewan are the spread of weeds and the danger of infection from flax wilt. On account of the difficulty of removing small weed seeds from threshed flax the seed is often very impure. Flax sickness can only be cured or controlled by (1) using sound plump seed from uninfected fields if possible; (2) treating the seed with formalin; and (3) planting flax on the same field not oftener than once in five or six years.

FIELD PEAS.

The *Field Pea* is but little grown in Saskatchewan because of (1) danger of frost in the fall; (2) low yields in the drier areas; and (3) the difficulty in harvesting; and (4) relatively high cost of seed.