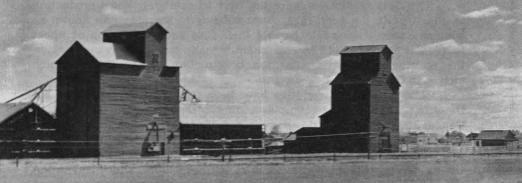
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HISTORY OF

## WHEAT

IN CANADA



RESEARCH BRANCH

C A N A D A
DEPARTMENT
OF AGRICULTURE

## HISTORY OF WHEAT IN CANADA

Although wheat is not a native plant of the Americas it has adapted itself exceedingly well to this continent. Wheat production has developed into one of Canada's major industries.

Wheat was introluced to America by the Spanish during their conquest of Mexico about 400 years ago. It was first grown in Canada in 1605 by a group of French colonists led by the famous explorer Champlain. The farming industry grew steadily in French Canada and by 1754 wheat shipments were being made to other French colonies. After the British captured Canada from the French in 1760 wheat began to move to Great Britain. This was the beginning of a movement which played an important part in the building of Western Canada.

The hardships encountered and endured by the early pione is as they pushed their way westward through the prairie regions are well known. Not as familiar but of the utmost importance was the struggle to produce suitable wheat varieties for this new country.

The Selkirk settlers were the first to establish wheat production in the West in the year 1812. After settling in the area now known as Winnipeg they managed to harvest their first successful crop of wheat in 1815. From that date onward wheat acreage rapidly increased across the prairies, especially after the construction of the C.P.R. which arrived in Calgary in 1885.

Many new wheat varieties have been produced over the years but three in particular have been outstanding in their importance to Western Canada. They are Red Fife, Marquis and Thatcher.

Red Fife is named after an Ontario farmer David Fife, who in 1842 received a sample of wheat of Polish origin. This he planted and found to his disappointment that most of it did not mature. One plant in the field, however, did ripen and three heads were carefully harvested and increased. This was the beginning of a variety which proved to be a good yielder and of much better quality for bread making than any variety previously grown in Canada. It was relatively earlier in maturing so could be grown in areas where the season was comparatively short. The ancestry of all important varieties of wheat now grown in Western Canada can be traced back to the original few heads of Red Fife produced by David Fife.

Red Fife, although better than anything up until that time had its short-comings. It was still not early enough to be a sure crop on the prairies. This led to greater efforts to produce a variety more suitable to conditions in the West. In 1904 Dr. Charles Saunders investigated a cross of Red Fife and an early maturing variety from India, Hard Red

Calcutta, which had been made a few years earlier by his father. Under test it proved to be exactly what Dr. Saunders was looking for. He named the new variety Marquis.

Marquis was earlier maturing than Red Fife and was ideally suited to the prairies. Its quality was outstanding and although Marquis has been replaced by newer varieties it is still considered the standard of milling and baking quality for hard red spring wheat in Canada.

Around the time of the first war wheat production suffered a severe blow in Canada due to a plant disease known as stem rust. In the year 1916 losses were estimated at 100,000,000 bushels. Unfortunately Marquis was susceptible to the disease, consequently new varieties of wheat resistant to stem rust were urgently needed.

For several years following this first outbreak of stem rust scientific plant breeding and disease studies advanced considerably both in this country and the United States. Close cooperation existed between the research men in both countries and in 1935 the first rust resistant wheat variety was introduced into Canada from the University of Minnesota. This variety was called Thatcher and one of the parent varieties used in the cross was Marquis. Thatcher was rust resistant and about a week earlier in maturing than Marquis. It was also a heavier yielder than Marquis and for a number of years was the most important variety grown in the West.

The most recent epidemic of rust in Western Canada proved to be of a strain to which even Thatcher was susceptible. This new strain of rust is referred to as 15B. Plant breeders were aware that such a strain existed and produced a new variety with the required resistance. This was developed in the Rust Research Laboratory in Winnipeg and was distributed to the rust areas of Manitoba and Saskatchewan in the spring of 1954. The new variety is named Selkirk.

Although Red Fife, Marquis and Thatcher were at one time Canada's eading wheat varieties, many others have been used extensively by prairie farmers. Such names as Garnet, Saunders, Red Bobs, Redman, Rescue, Chinook, and many others are well-known varieties throughout Western Canada.

Investigations into the problems of stem rust have been centered in Winnipeg, Manitoba, in the Rust Research Laboratory since 1925. Intensive plant breeding studies have been made in the past with marked success but the fight against rust still goes on.

Rust epidemics, frost, floods and insect damage have all stood in the way of the development of the Canadian prairies. Obstacles such as these have been an incentive to the resourcefulness of our Agricultural Scientists. Through their efforts and the indomitable spirit of the Canadian farmer, Canada ranks as one of the major producers of the finest quality wheat in the world.

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