

The Story of Canadian Wheat—Archibald A Review

"The Story of Canadian Wheat" is the subject of the Hilgendorf Memorial Lecture, delivered at Canterbury Agricultural College, Lincoln, New Zealand by Dr. E. S. A. Archibald, Director of Experimental Farm Services of the Department of Agriculture, Canada, upon the occasion of the 7th Pacific Science Congress in Auckland and Christ Church, N. Z. This lecture has recently appeared as a 40 page pamphlet. It carries the story of Canadian wheat growing from Canada's first farmer, Monsieur Louis Hebert, 1623, to the early wheat growing trials in the Red River Valley (of the North) in 1812 down to 1885, a period which saw the introduction and spread of Red Fife wheat in eastern Canada and the beginning of western Canadian agriculture. The second stage of the story covers the period, 1885 to 1916, a period during the Canadian government support of scientific research which program led to the introduction of Marquis wheat. The battle to secure stem rust resistance began in the period, 1916-1930. The special Rust Research Laboratory for Canada was established in 1924. Plant pathologists and cereal breeders joined forces. Renown wheat was distributed in 1936 as the first stem rust resistant wheat of Canadian origin. Archibald lists the following stem rust resistant wheats of Canadian origin (figures in parentheses give the years of license of the variety): Apex (1936), Renown (1936), Coronation (1938), Regent (1939), Redman (1946), Rescue (1946), Saunders (1946) and Cascade (1947). Apex, Rescue, and Saunders are susceptible to leaf rust; the others are described as from moderately resistant to moderately susceptible.

Rescue, the sawfly resistant wheat, is noted as having originated from a cross between Apex and S. 615. S. 615 is a selection from a strain of solid stem wheat obtained from Dr. O. Frankel, Wheat Research Institution, Lincoln, New Zealand.

Archibald comments upon the appearance of the virulent race of stem rust, 15B, saying that it "has been found occasionally in the United States in these states bordering Canada and in 1946 it was collected in Manitoba." Archibald adds, "It is capable of attacking all the resistant varieties now being grown." Dr. Archibald concludes his interesting lecture by paying tribute to "International Cooperation" saying, "Present day varieties include, as has been shown, inheritance factors secured in different parts of the world. In this connection it is significant that FAO has placed considerable importance on its current project of cataloguing plant breeders in different parts of the world and of establishing nurseries of wheat breeding stocks for international use."

One is a bit surprised to note that Dr. Archibald makes no reference to Dr. A. H. Reginald Butler's splendid volume, "Essays on Wheat" published in 1919. Butler's story covered the discovery and introduction of Marquis wheats, the early history of wheat growing in Manitoba, wheat in western Canada, the origin of Red Bobs and Kitchener, and the wild wheat of Palestine. (Reviewed by H. L. Walster).

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