

APPENDIX H

THE GRAIN RESEARCH LABORATORY

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Section 22 of the Canada Grain Act requires that "The Board shall maintain an efficient and adequately equipped laboratory for research work in relation to grain."

The following summary report of the work of the Grain Research Laboratory for 1958 deals with the quality of Canadian grain marketed during the 1957-58 crop year, the estimated quality of 1958 grain crops, and with research and other activities. As in previous years, the Laboratory will publish a separate annual report that discusses these and other phases of the year's work in greater detail.

QUALITY OF GRAIN MARKETED IN 1957-58

Throughout the 1957-58 crop year, the Laboratory continued studies of the quality of spring wheat, durum wheat, barley, oil seeds and other cereal grains at various stages of marketing. Comprehensive data obtained from these studies will be reported in the Laboratory's 1958 annual report as tables and maps. The 1957 spring wheat crop was the highest in average protein content since 1947, and represented a return to the exceptionally strong wheats which Canada harvested continuously during the dry years between the late thirties and early forties. But it was well into the crop year before any appreciable quantity of this wheat showed in export shipments as storage space from coasts right back to farms was filled with wheat from the large carryover of below-average protein content. Improvement in the quality of exports did occur, however, as the crop year progressed, particularly at the Pacific coast.

Spring wheat marketed in 1957-58 was high in bushel weight and flour yield, and, in general, protein levels were a little higher than for corresponding grades the previous crop year. Baking strength was definitely higher than in 1956-57, and carrying power for weaker wheats was very good indeed. Baking absorption and gassing power were both at satisfactory levels. Durum wheat was higher in protein content than for several years, and macaroni-making quality was similar in many respects to that of the previous crop. Extra No. 4 C.W. and No. 4 C.W. were the principal grades exported. Malting barley was about average in quality and higher in nitrogen content than in 1956-57. The flax crop was not quite so high in either oil content or iodine value as in the previous crop year, and the rapeseed crop was also a little lower in oil content.

ESTIMATED QUALITY OF 1958 CROPS

The 1958 Western wheat crop is one of the smallest harvested in the last ten years, but it is low in moisture and high in grade and protein content. Production is estimated at 341 million bushels (including 16 million of durum wheat) from 20.2 million acres. About 90% of the spring wheat is expected to grade No. 3 Northern and higher, and for the first time in several years there is a fairly large volume of No. 1 Northern. Protein content is 13.8%, which is 0.3% higher than the long-term average. Bushel weight is high, and the Northern grades mill well and give high yields of flour. Baking strength is high, carrying power is very good, and doughs are lively and extensible. Baking absorption is high and gassing power is satisfactory. The new crop is higher in baking strength and better in carrying power than wheat exported in the last quarter of the 1957-58 crop year.