

QUALITY OF SEEDS SOLD IN THE TRADE.

For the purpose of obtaining some definite information regarding the quality of the agricultural seeds retailed by seed vendors to the farmers of Manitoba, Saskatchewan and Alberta, a number of samples were last year secured by direct purchase from retail merchants. Information was obtained with most of the samples showing their origin, the name and address of the seller and the price charged to farmers. The following table gives a summary of the results of the analyses of a few representative samples that were examined in the Seed Laboratory at Ottawa:—

RESULTS OF SEED INVESTIGATION, 1905, MANITOBA, SASKATCHEWAN AND ALBERTA.

Laboratory test number.	Kind of Seed.	Place where bought.	Per cent of pure and living seed.	Per cent of seed that germinated in 4 days.	Retail price to farmers.	Actual cost to farmers for pure and living seed.	Total number of weed seeds per lb.
1202	Oats.....	De Winton, Alta....	97.94	91.5	60c. per bush.	61c. per bush..	45
1180	".....	Ellisboro' Sask.....	97.68	97	60c. " ..	61c. " ..	99
1158	".....	Gilbert Plains, Man.	63.89	48.5	25c. " ..	39c. " ..	108
1245	".....	Great Bend, Sask....	49.40	20.3	42c. " ..	85c. " ..	18
1203	Barley.....	De Winton, Alta....	95.94	97	50c. " ..	52c. " ..	270
1175	Hungarian Grass	Oxbow, Sask.....	79.30	78.5	\$3 " ..	\$3.80 per bush.	810
1237	Millet.....	Alameda, Sask.....	91.64	92.8	" ..	" ..	5,580
1200	R. Clover....	Le Winton, Alta....	89.49	89.3	25c. per lb....	28c. per lb....	1,980
1157	Alfalfa.....	Stirling, Alta.....	55.11	59	15c. " ..	27c. " ..	8,100
1073	Alsike.....	Shell Brook, Sask....	82.80	73.5	20c. " ..	24c. " ..	450
1190	".....	De Winton, Alta....	88.43	86	25c. " ..	28c. " ..	1,575
1159	Timothy.....	Gilbert Plains, Man.	79.89	72.8	\$4 per bush....	\$5 per bush....	15,300
1201	".....	De Winton, Alta....	87.39	86	7c. per lb....	8c. per lb....	900
1174	".....	Oxbow, Sask.....	85.15	87	\$2.50 per bush.	\$2.90 per bush.	9,225
1072	".....	Shell Brook, Sask....	91.96	86.5	7c. per lb....	8c. per lb....	900
1043	".....	Ellisboro', Sask.....	87.17	84	7c. " ..	8c. " ..	2,925
1155	Rye Grass....	Stirling, Alta.....	89.23	88	10c. " ..	11c. " ..	4,275
1204	Bromus Inermis..	De Winton, Alta....	76.65	54.5	7½c. " ..	10c. " ..	7,875
1161	Brome Grass....	Gilbert Plains, Man.	56.32	51.5	" ..	" ..	450
1156	".....	Stirling, Alta.....	43.93	39.5	10c. per lb....	23c. per lb....	

The per cent of pure living seed as shown in the table is determined from the proportion by weight of pure seeds of the kind represented and the total per cent of seeds that germinated according to the standard regulations for seed testing. The per cent of seeds that germinated in four days is given, however, as it is considered to be a more accurate indication of the use value of the seed when sown under ordinary conditions. The retail price to farmers, as shown in the table, was the price charged for the seed when sold in bulk lots; and the actual cost to farmers for pure living seed was calculated after deducting the loss on account of dead seed, weed seeds and other foreign matter. This loss in a number of samples amounted to considerable, the actual cost of pure living seed being almost twice that of the retail price in a few of them, but the most serious and far reaching loss to farmers is in sowing seed containing large numbers of noxious weed seeds.

Wild oats and wild buckwheat or black bindweed were the most common impurities found in the wheat, oats and barley. In the smaller seeds the variety of weed seeds was much greater, and included white cockle, Canada thistle, dock and many species of weeds that are comparatively new to the west.

Reliable seed merchants do not retail seeds of any kind that are inferior in quality to the average of the seeds sold among the farmers themselves. The chief evil of the seed trade arises in the importation and distribution in a locality, of commercial seed containing seeds of extremely noxious weeds. The trade in grass and clover seeds,