

and I think, perhaps, it would be worth while to quote these. At our Scott farm we find a difference of only about 2 bushels per acre in favour of Garnet over Reward. There is quite a spread at Lacombe, about 8 bushels, in favour of Garnet over Reward; at Fort Vermillion about 3 bushels, and at Beaver Lodge practically no significant difference. Both varieties ripen at about the same time. Reward is stronger in the straw and has also been found more suitable for rolling country, because of the fact that you can let your crop stand on the elevations, where it naturally ripens earlier, until the crop in the depressions ripens, without any great fear of shattering to any extent. That, of course, is not true in the case of Garnet. Under the highly tilled conditions which prevail on our experimental farms you will see we have not had a very great spread in the yields; but generally speaking we have found, however, that out in the open country Reward will not rustle quite so well as will Garnet, and many farmers have been finding that under rather poorly prepared conditions they may expect a fair crop of Garnet, whereas Reward might yield very poor returns. At the same time a great many farmers are finding that by properly cultivating the soil, and putting this wheat on clean grounds, and using about 2 bushels per acre, they are getting really very good returns indeed. And so there is that hope, and some might feel that under these conditions separate grading would not be a hardship. It would certainly not be anything like the hardship it would have been two years ago.

There is another matter which I think may prove helpful—Marquis Wheat. Marquis is still our standard variety. Two years ago we initiated the scheme of collecting samples from farmers wagons at elevators, and making growing tests to determine varietal composition. Last year we grew at 22 different points in the three prairies provinces samples from over 5,000 farmers—to be exact, 5,216 farmers. We went over these plots and classified the stock into good, poor and bad on the basis of suitability as seed stock. We found that over forty per cent of these people were growing a type of seed wheat that they should not grow. These samples were collected from 294 elevator districts, yet in every elevator district we found some first class material grown by certain outstanding men; and yet this was not known to any extent by any of their neighbours in the district. Incidentally, our scheme is to link these two people up through the medium of the elevator people, in order to reduce the number growing inferior grain. To me it was exceedingly interesting to find that a very large percentage of these men who were growing what they believed to be Marquis were growing wheat which contained very very little Marquis at all. They were growing a mixture of which certain many late Red Fife types predominated and naturally were likely to lose in grade as well as in yield. Many Garnet growers had been growers of the above wheat but dropped it because of the risks entailed and who would not have done so had they had genuine Marquis. Knowing there was a lot of this class of material in the west. We started five or six years ago to develop a superior strain of Marquis, and as a result we now have large quantities of this strain. Our Branch Farms at Indian Head, Swift Current and Scott, for instance now produce this strain of Marquis exclusively. We distributed a lot of this seed to registered seed growers who have been doing everything possible to get back into good Marquis. As a matter of fact one of the important problems in the West to-day is to re-establish Marquis, or a wheat of that type; and I feel that within the next two or three years this program we are going to step up the general level of wheat over large areas of the West materially, and I think to that extent we will reduce the acreage devoted to wheats like Garnet.

*By Hon. Mr. Motherwell:*

Q. Has it the same tendency to pie-ball?—A. It is a typical Marquis, very pure and uniform; there is no essential difference, in that respect I think.