

## APPENDIX No. 1

A. They are one-tenth of an acre. In barley there was a decrease in yield on plots similarly treated for both years, for which I am unable to assign any reason. The increase in oats under like conditions was very striking. After eleven crops of oats, averaging 30 bushels 20 pounds per acre, on these unfertilized plots, the yield has been increased to 48 bushels 3 pounds in the one case, and in the other from 21 bushels 9 pounds to 30 bushels 15 pounds, an average increase for the two plots of oats of 13 bushels 23 pounds of grain per acre. This, I think, is most conclusive evidence, in favour of the use of green clover ploughed under as a fertilizer. I want to emphasize this one point, that there perhaps is as much due to the action of the additional humus which is put into the soil by the decay of the clover as there is in the actual plant food which is added to the soil. Plants grown in a soil which has a low power of holding moisture, are placed at a great disadvantage and cannot make free use of the plant food existing in the soil. Further evidence as to the usefulness of green clover on other crops will be found in the annual report of the experimental farms for 1901.

*By Mr. Charlton :*

Q. There are one or two questions I would like to get information on. I have found the greatest difficulty on my own farms in getting clover to take. I want to know the method you pursue in seeding, in order to get a catch?

A. We use from ten to twelve pounds of common red clover seed per acre. We have tried both these quantities several times and have had good results in all cases. The clover seed is sown with the ordinary seed-drill with the clover seed attachment. It is sown with the grain, so there is no additional expense as to labour connected with it.

Q. It is sown with the grain ?

Q. Yes, and we have never had any trouble in getting a catch of clover at Ottawa in any year.

Q. It is sown with the grain you say ?

A. Yes, with the grain.

Q. In the west we find it almost impossible to get a catch owing to the seed becoming dry because of the hot weather, which prevents it germinating and sprouting and kills it off.

A. That is owing to the heat of summer.

Q. I would not expect such a result if the clover is sown with the grain, and the grain got in early as the ground is then usually quite moist.

*By Mr. Heyd :*

Q. How deep do you sow it ?

A. It is scattered by the sower on the surface, but the action of the grain-drill partly covers it, but we generally run a roller over the ground and that is usually sufficient to cover the seed lightly.

*By Mr. Charlton :*

Q. The clover is ploughed down in the first season, is it ?

A. Yes, in October. I wish it to be understood that I am not discussing this subject in connection with fodder for cattle, but merely the influence of the clover on the subsequent crop. I do not say that this is the most economical method of using the clover; where a farmer can turn stock in and feed it off, that is probably the most economical method of using the crop.

*By Mr. Wilson :*

Q. Would it have the same effect ?

A. Practically the same, because the animals eating that clover off would deposit on the soil fertilizer which would represent the humus and about 80 or 90 per cent of the elements of fertility in the clover.