

## UNIT VALUES OF POTASH.

Fertilizer.	Price per ton	% Potash, or units in one ton.	Price per unit of potash.	Condition or kind of potash.
Sulphate of Potash .....	\$50 30	47	\$1 07	Sulphate
Muriate " " .....	41 80	48	87	Muriate or Chloride

From the study of the use of the different kinds of Nitrogen, Phosphoric Acid and Potash which has already been given, it will be realized that the fertilizer supplying the cheaper unit value is not necessarily the best to use. Each fertilizer has its own particular use which should be considered in conjunction with its cost.

## OBJECT OF EXPERIMENTING WITH FERTILIZERS.

The proper and profitable use of fertilizers will only come with considerable experience. There is no better way for the farmer to familiarize himself with the peculiarities of his soil, the characteristics of his crops and the various constituents of fertilizers than by actual experiments. Considering all the different conditions existing it is unwise for the farmer to use large quantities of these expensive materials without proving that they will give profitable results. These experiments may be of a very simple nature and the time and labor required in conducting them is practically negligible. An examination of soil in the laboratory often provides valuable information on which to base experiments and the results of fertilizer applications on similar soils are a useful guide. In practice, however, no two soils of the same class are found exactly alike, and each field may be looked upon as having its own peculiarities. Hence, it is most important that the farmer should find out what is the best and most profitable treatment on his own farm.

Furthermore, when the experiments include the use of the simple materials, such as nitrate of soda, muriate of potash and superphosphate, the experimenter becomes familiar with the fact that he is dealing with three distinct constituents of plant growth. It is to be feared that in many cases purchasers of mixed fertilizers do not fully realize the fact and buy the material more from the name it bears than from any definite knowledge of the amount of nitrogen, phosphoric acid and potash that may be in the fertilizer. Again, carefully conducted experiments enable the experimenter to note the effect of the different constituents upon the growth of the crops. This in itself is valuable, because it helps him to form some idea of the needs of a growing crop from its appearance.

In this way the experiments not only help to make clear the peculiarities of the soil and crops, but they also aid the experimenter to become more familiar with the fertilizers themselves. Thus, properly conducted experiments should lead to the more intelligent and economical use of these expensive materials.

The above prices were quoted in the spring of 1914 for ton lots from the Toronto warehouses. These prices may vary considerably each year, and in different places, and the farmer should calculate the unit values accordingly.