

The data which I have just cited—obtained by careful experiments over a number of years, employing the cereals, Indian corn and potatoes as test crops—are, in my opinion, of such a striking character as to leave no doubt as to the conclusion to be drawn therefrom. They unmistakably assure us that the clover crop has a most marked effect in increasing a soil's productiveness, and confirm in the most emphatic manner the chemical results.

We have referred to the fact that in certain of the western provinces of the Dominion we find extending over very large areas some of the richest wheat soils in the world. To support this statement we have not only our own analyses, but those of European chemists. Where these soils are being cultivated the system of continuous cropping with wheat is in vogue, and practically nothing is being put back into the soil. From what has been stated in this address it will be apparent that not only are such soils becoming poorer in available plant food constituents by the amounts removed yearly in the crops, but that much organic matter and nitrogen is necessarily oxidized and lost by the indispensable cultural operations. When a short time ago in Portage la Prairie, one of our very best wheat areas, I was told by several careful and observant farmers that already a diminution in the yield other than that which could be ascribed to climatic influences (for it was a more or less steady decrease) was to be observed on the older lands, that is, on those that had been consecutively cropped with wheat for twenty or twenty-five years. Thus it comes about that the farmers in many districts of the Northwest are now recognizing the necessity of adopting some plan for the maintenance of soil fertility, and interested and encouraged by the results obtained through the use of clover in Eastern Canada, have already commenced a trial of this method.

If it behooves the Western farmer who has tilled but for a quarter of a century one of the most fertile soils of the world, to pay attention to this matter of the restoration of the nitrogen, humus and available mineral food, how much more important is this subject for the farmers of Eastern Canada, where for the most part the soil has been much longer tilled, and where originally it was not of that extreme richness as in the Northwest! In my opinion, the average yield in all our Eastern provinces would be