SODIUM NITRATE AS A FERTILIZER FOR WHEAT ON CERTAIN IOWA SOILS

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Since wheat is one of our main food crops and an important crop in Iowa, it is quite desirable that attention should be directed to methods of producing a higher yield per acre and a better milling quality of grain. It would be very much worth while to find some fertilizer which would serve the double purpose of improving both the yield and quality of wheat. It appears from previous work that sodium nitrate might serve this double purpose under certain conditions.

For many years investigators have been studying the effects of nitrogen fertilizers on the yield and protein content of wheat. The literature along this line has been reviewed elsewhere and will not be discussed here. Suffice it to say, that earlier experiments show that different results may be expected from the use of sodium nitrate on different soils, under different climatic conditions, and in different seasons. There has been little work along this line on Iowa soils and this test was outlined with a view of obtaining some information regarding the desirability of using nitrates on wheat in Iowa.

EXPERIMENTAL

In the spring of 1928, two fields of winter wheat were selected for experimental work. One was on Shelby loam and the other on Waukesha silt loam. The results of the work on these two fields are given separately below.

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