

## BULLETIN NO. 188.

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### THE RELATION OF SULFUR TO SOIL FERTILITY.

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#### HISTORICAL.

Numerous experiments have been made in the last few years in determining the importance of sulfur compounds in plant growth and their value in soil fertility. In a former publication,<sup>1</sup> the writer gave a resume of the experiments that have been made along this line and more recent ones are included here in order to show the present status of this subject.

Chancriin and Desriot<sup>2</sup> report some further experiments on the effect of adding sulfur to potatoes and beets. The results show that applications of 178 to 356 pounds per acre gave increases in the yield of both crops.

Tritschler<sup>3</sup> has found in experiments with mangelwurzels that the use of sulfur slightly increased the yield and sugar content but this is attributed not so much to the fertilizing action of the sulfur as to its protection of the crop from insects and disease.

Lierke<sup>4</sup> cites observations on fruits which indicate that fertilizing materials containing considerable amounts of sulfates produce better results than those free from such compounds.

Vermorel and Dantony<sup>5</sup> have grown wheat and kidney beans in paraffined pots, the soil in which was freed from organic matter. With nitrogen as nitrates, neither sulfur