EFFECT OF RATE AND METHOD OF APPLICATION OF FERTILIZER ON THE GERMINATION OF WHITE BEANS

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INTRODUCTION

The annual summary of the Michigan Crop Report for 1924 credits Michigan with the production of 75% of the white beans grown in the United States. Nevertheless, it is an unfortunate fact that little definite information is available regarding the fertilization of this crop and in certain localities there is still some prejudice against the use of commercial fertilizers in bean growing.

The results of several years of field experimentation by the Soils Department have given valuable information regarding proper fertilizer analyses for beans, but they have also given rise to a number of very pertinent questions regarding fertilizer practice. The work here reported was undertaken in an effort to answer some of these questions.

HISTORICAL

The writers have found very few reports of experiments dealing with the influence of fertilizers on the germination and growth of white beans. In the references found failure to give rate and method of application of the fertilizer and lack of sufficient information regarding the nature of the soil used have rendered the data of little assistance. A number of excellent papers bearing indirectly on the subject have been of assistance and reference to them is made at various points in the body of this report.

EXPERIMENTAL

A rather heavy Brookston loam and a heavy phase of the Hillsdale sandy loam, which are quite representative of the soils on which a large acreage of beans are grown, were selected for the work.

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