THE WEATHER AS A FACTOR IN CROP PRODUCTION

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In experimental work with fertilizers, one of the important questions with which investigators are concerned is the effect of various treatments on crop yields. It is known, of course, that very frequently the fertilizer effects are masked by weather conditions to such an extent that it is impossible to obtain consistent results which may be ascribed to any particular treatment. This is especially true on the lighter sandy types of soil. The distribution as well as the total amount of rainfall, and the temperature conditions must, therefore, be taken into consideration in interpreting yields obtained during any one year.

At the Spooner Branch Experiment Station, the writers have had occasion to study the effect of temperature and precipitation on the yields of corn during the years 1918, 1919 and 1920. The station is located in the jack pine belt, the soil of which is mapped as Plainfield sandy loam by the Wisconsin soil survey. The soil mass contains considerable fine and medium sand with some gravelly material in the surface soil. The subsoil is sandy and gravelly in character. The soil type is influenced markedly by moisture conditions.

The rotation consists of corn, oats and clover. The fertilizer experiment involves primarily a study of manure and crop residues supplemented by phosphates and potash in varying amounts. In

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