THE EFFECT OF THE LACK OF AVAILABLE MANGANESE IN THE SOIL ON CROP YIELDS

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In several previous papers from this Station (2, 3), attention has been called to the effect of a lack of manganese on several different crops. The lack of available manganese is indicated by a typical chlorosis in some of the crops and certain characteristic symptoms in other crops. In this paper results of further field tests with different crops will be presented.

The literature on the subject of manganese deficiency in soils has recently been reviewed by Carlyle (1) and by Willis (5). In general, a fairly close correlation has been found between heavy liming and indications of manganese deficiency. At the Rhode Island Station the lack of available manganese, as shown by certain crops, has always been the most pronounced on plats where the soil had been limed to neutrality or near neutrality. In some cases other investigators have suggested different possible causes for the development of manganese deficiencies in the soil.

The soil at this station where these experiments are being conducted...