

RELATION BETWEEN SOIL PROPERTIES AND AVAILABLE MICRONUTRIENTS IN SOIL

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ABSTRACT

The study was conducted in soils of Salem district of Tamil Nadu to understand the relation between soil properties and micronutrients availability. Totally 1691 soil samples were collected @ 4 samples per village covering 385 panchayat villages in 20 blocks of Salem district. Samples were analysed to understand the soil properties and available micronutrients status. The database on the analysis of soil available micronutrients was developed using Microsoft Excel. The inter relationship between available micronutrients and soil properties were worked out through simple correlation analysis. Results showed that Soil reaction (pH) was significantly and positively related with B, significantly and negatively related with Fe, Mn and Zn where as non significantly and negatively related with Cu. Electrical conductivity was significantly and positively related with Fe and B and negatively related with Zn, Mn and Cu. Organic carbon showed a significant positive relation with Mn while non significantly positively related with Fe, Zn and B and non significantly negatively correlated with Cu. Free calcium carbonate showed significant negative correlation with Fe, Mn and B, and non significantly negatively correlated with Zn. However significant positive correlation existed with Cu.

KEYWORDS: Correlation, Soil Properties, Micronutrients

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