SUITABILITY OF PLANTING TECHNIQUES AND FERTILIZER REQUIREMENTS FOR MAIZE ON THREE SOIL SERIES BELONGING TO THREE DIFFERENT SOIL FAMILIES IN POTHWAR

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ABSTRACT

Planting techniques for maize are presently recommended without taking into consideration soil characteristics and landscape positions. Secondly, fertilizer recommendations are also mainly climate and crop oriented and are not site specific. An experiment was conducted to find out most suitable planting techniques and fertilizer requirements for maize crop on three soil series in subhumid climate in pothwar plateau under rainfed conditions. The benchmark soil series were Guliana, Missa and Balkassar. Planting techniques of maize on three soil series were different from one another. Planting on ridges, for Guliana soil series, broadbeds for Missa soil series and on flat parts for Balkassar series was suitable. The planting technique depended upon physical characteristics and attributes of landform. Grain yield for specified fertility level, depended upon physical and chemical characteristics and moisture status of the soil. Nitrogen and phosphorus response varied not only with the soil series but also with planting technique. Therefore, the optimum fertilizer levels were different for a soil series with different planting techniques. The optimum fertilizer level was also different for different soil series.