

EFFECT OF MOP AND SOP ON PLANT CHLORIDE UPTAKE AND SOIL PROPERTIES IN A RICE-WHEAT ROTATION

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ABSTRACT

A three years field experiment was conducted from 1990-91 to 1992-93 on Faisalabad soil series (Ustalf Haploargids) to compare the impact of muriate of potash (MOP) and sulphate of potash (SOP) on soil chemical properties and plant uptake of Cl in rice- wheat rotation. There was no change in soil Cl content after three years of MOP application. However, significantly lower Cl concentration in the soil was observed after each harvest of rice, compared with wheat crop, irrespective of K source. The trend was opposite for soil K status. No effect on soil pH and EC was found due to treatments but soil EC was higher after wheat crop than rice crop, irrespective of K source. Plant tissue Cl concentration at maximum tillering stage showed a difference in all treatments throughout the study period. Muriate of potash applied over three years at recommended K rates to rice-wheat system did not cause any toxic / suppressive effect on crop yield.