

## EFFECT OF GYPSUM FINENESS IN THE RECLAMATION OF SALINE-SODIC SILTY CLAY LOAM SOIL

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*This experiment was conducted in Soil and Water Testing Laboratory of Mona Project during 1987-88. Silty clay loam saline-sodic soil of which gypsum requirement was 10.5 metric tons/acre ft. was filled in PVC lysimeters of 6.6 cm diameter and 60 cm long. Soil was packed by means of a specially designed wooden cube. The required quantity of different mesh sized gypsum as per 100% of gypsum requirement was added to the upper 15 cm of the soil in the column. The reclamation process was very slow as it took 6 to 8 months for reclamation of the 45 cm soil column where gypsum was used but this process was much more slow where simple leaching with good quality water was done. Gypsum 60-80 mesh and gypsum powder were comparatively faster in their effect on reclamation as compared with other gypsum grades but the differences were statistically insignificant. Effect of different grades of gypsum was significant in reducing the EC and SAR of soil. Gypsum with 60-80 mesh size and gypsum supplied from Quaidabad crusher were more efficient for the reclamation of silty clay loam soil.*

### INTRODUCTION

Agriculture, the main stay of Pakistan's economy, is confronted with the problems of salinity and sodicity which are responsible for degradation of soils and reduced crop yields. To feed the ever increasing population of the country salt affected land requires attention to restore

and Abrol, 1980, 1982) are of the view that gypsum mixture of variable particle size is more appropriate for reclamation of saline sodic soil. Very little work has been carried out in Pakistan on the efficiency of gypsum mesh size or wider particle size distribution in reclaiming saline sodic or sodic soil. This study was planned to compare efficiency of different mesh size gypsum fineness for reclamation of