Correlation and Path Coefficient Analysis for yield and physiological attributes in Rice (*Oryza sativa* L.) under Saline Soil Conditions

M Sudharani, P Raghava Reddy, V Ravindra Babu and G Hariprasad Reddy
Seed Research and Technology Centre, Rajendranagar, Hyderabad-30

ABSTRACT

This study performed to determine the association between yield and yield components in eight rice genotypes (*Oryza sativa* L.) under saline conditions. The results indicated that the traits panicle length, number of filled grains per panicle and panicle weight correlated significantly with grain yield, while grain yield was negatively correlated with Na^+/K^+ ratio and Standard Evaluation Score for visual salt injury. Path coefficient analysis revealed that grain yield was associated with number of tillers per plant, number of filled grains per panicle and harvest index with positive direct effects under stressed situation. Information obtained in this study revealed that the traits, number of filled grains per panicle and number of tillers per plant could be used as selection criteria for improvement of grain yield under saline soil conditions.

Key words : Correlation, Path coefficient analysis, Rice, Saline soils.