Genetic Variability and Character Association in Rice (*Oryza sativa* L.) Under Organic Fertilizer Management

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ABSTRACT

Estimates of genetic parameters and correlation of fourteen quantitative traits including the grain yield were studied in thirty two rice genotypes under organic fertilizer management. Characters like number of grains per panicle, grain yield per plant, number of effective tillers per plant, plant height and harvest index had high estimates of PCV, GCV and broad sense heritability. High heritability coupled with high genetic advance as per cent of mean were recorded for days to 50 % flowering, days to maturity, number of effective tillers per plant, plant height, number of grains per panicle, harvest index, kernel L/B ratio, 1000-grain weight and grain yield per plant. Grain yield per plant exhibited highly significant and positive correlation with number of grains per panicle, harvest index, panicle length, days to 50 % flowering, number of effective tillers per plant and days to maturity suggesting that the improvement in grain yield could be effective under organic fertilizer management, if selection is based on these component characters.

Key words : Correlation coefficient, Heritability, Organic rice,Variability.