Assessment of Genetic Parameters for Yield and Quality Traits in Colored Rice (Oryza sativa L.) Genotypes

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ABSTRACT

Genetic parameters for 15 yield and quality traits were studied in 26 colored rice genotypes. The results of genetic parameters revealed that high GCV and PCV coupled with high heritability and high genetic advance as percent of mean were observed for test weight, number of filled grains per panicle, total number of grains per panicle, solid loss, water uptake and alkali spreading value suggesting an additive type of gene action. The remaining traits manifested low to high GCV and PCV, moderate to high heritability and low to high genetic advance as percent of mean indicating the preponderance of both additive and non additive gene effects in controlling these traits.

Key words: GCV, PCV, Heritability, Genetic advance, Quality traits