GENETIC VARIABILITY AND HERITABILITY STUDIES IN RICE (ORYZA SATIVA L.) UNDER SALINE CONDITION

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Received-07.09.2015. Revised-14.09.2015

Abstract: Genetic parameters of variability and heritability of different characters were studied in 17 genotypes of rice. The coefficient of variation was highest for plant height followed by grain yield. The maximum genotypic coefficient of variability and phenotypic coefficient of variability were observed for Na⁺/K⁺ ratio, straw yield⁻¹, proline content, test weight. The heritability estimates were highest for Na+/K⁺ ratio, plant height and chlorophyll content. GA as % over mean were higher for Na⁺/K+ ratio, chlorophyll content, proline content, straw yield plant⁻¹ and test weight. Results on yield and contributing characters possesses sufficiently high values of heritability and genetic adavance which can be utilized for further improvement of rice and evolving a high yielding saline tolerant variety.

Keywords: Rice, Coastal salinity, Variability, Heritability

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