

# **Studies on genetic variability, heritability and genetic advance of elite salt tolerant lines of rice under dry direct seeded conditions**

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## **ABSTRACT**

In the present study 24 elite salt tolerant lines including two checks were evaluated in a randomized complete block design (RBD) for yield, yield components and lodging related traits of dry direct seeded conditions at Agricultural College Farm, Bapatla, Andhra Pradesh during *kharif*, 2023 to estimate the extent of genetic variability, heritability (broad sense) and genetic advance as per cent of mean. The analysis of variance revealed significant variability for all the characters. Among the traits, high phenotypic and genotypic coefficients of variation were recorded for root length at 15 DAS, number of productive tillers per plant, number of filled grains per panicle, culm strength, lodging (%), biological yield and grain yield indicating large amount of variation among the genotypes. High heritability coupled with high genetic advance as per cent of mean was recorded for root length at 15 DAS, root length at 30 DAS, shoot length at 15 DAS, shoot length at 30 DAS, field emergence % (15 DAS), number of productive tillers per plant, number of filled grains per panicle, culm strength, lodging (%), basal internodal length (cm), culm diameter (mm), culm thickness (mm), biological yield, grain yield and harvest index (%) indicating that these traits were governed by additive gene action and direct phenotypic selection may be rewarding for improvement of these traits in rice.

**Keywords:** *Genetic advance, GCV, Heritability, PCV and Variability.*