

Estimation of Genetic Parametrs for Yield Components in *Rabi* Sorghum (*Sorghum bicolor* (L.) Moench)

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ABSTRACT

Genetic variability, heritability and genetic advance for 10 quantitative traits in 50 genotypes of *rabi* sorghum (*Sorghum bicolor* (L.) Moench) were studied at Agricultural College Farm, Bapatla during *rabi* 2016-2017. The analysis of variance revealed significant differences among the genotypes for all the characters studied indicating that the data generated from the above diverse material shall represent wide variability. The genotypic coefficients of variation for all the characters studied were lesser than the phenotypic coefficients of variation indicating the masking effects of the environment. High PCV coupled with high GCV observed for ear head length and grain yield per plant indicate the presence of wider variability for these traits in the population studied. High heritability coupled with high genetic advance as per cent of mean was recorded for plant height, leaf length, ear head length, ear head width, 100 grain weight, grain yield per plant and harvest index indicating the operation of additive gene action in the inheritance of these traits and improvement of these characters is possible through simple selection.

Key words: *Genetic Advance, Heritability, Variability.*