

Assessment of Genetic Variability, Heritability and Genetic Advance for yield and Quality Attributes in Grain Sorghum

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ABSTRACT

Fifty sorghum genotypes were studied with objective of estimating the genetic variability, heritability and genetic advance for yield and quality attributes. The high PCV and GCV value observed for the characters *viz.*, plant height, panicle length, 1000 seed weight, fat content, fibre content, total phenol content, total antioxidant activity, free amino acid content and grain yield, whereas low for total carbohydrate content. High heritability coupled with high genetic advance was observed for all the characters studied except total carbohydrate content is suggesting the predominance of additive type of gene action in controlling these traits and simple selection would be sufficient for these traits to bring genetic improvement in desired direction.

Keywords: *Genotypic coefficient of variation (GCV), phenotypic coefficient of variation (PCV), heritability, genetic advance and quality attributes.*