## Heritability and genetic advance evaluation in wheat (*Triticum aestivum* L.) based on agronomic and morphological traits

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**ABSTRACT :** The present study was undertaken to know the magnitude of genetic variability, heritability and genetic advance in selection of desirable characters which can be used as a criteria for further utilization of plant materials in breeding. Field experiments were conducted during two consecutive *rabi* cropping seasons of 2015 and 2016. Thirty wheat varieties were evaluated for morphological data for sixteen agronomic characters. The higher magnitudes of genotypic coefficient of variation (GCV) and phenotypic coefficient of variation (PCV) were recorded for plant height, peduncle length, grain yield, straw yield, number of tillers/m, grain weight/spike and harvest index across the experimental years as well as pooled data. The high heritability in broad sense was estimated for many characters. High heritability followed by low genetic advance were recorded for plant height, peduncle length, thousand grain weight and grain yield recorded across the year and pooled data that indicated predominance of non-additive gene action in the inheritance of these traits. The results stated that plant height, peduncle length, thousand grain weight and grain yield could be useful character for improving the wheat varieties under study for further breeding program.

Key Words : Genetic variability, GCV, PCV, heritability and genetic advance.