

GENETIC VARIABILITY, CORRELATION AND PATH ANALYSIS IN WHEAT

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Abstract: A field study was conducted in Punjab Agricultural University during 2016 under restricted irrigation condition to study the genetic variability, genetic advance, correlation and path analysis of yield contributing characters of 27 Iranian wheat landraces. Genotypic and phenotypic correlation studies reveals that tillers per metre row length, spikelet per spike, grains per spike, grain weight and harvest index is significantly and positive correlated with grain yield at 1% and 5% probability level. Therefore, these characters may be effective as selection indices during breeding programmes for improving grain yield. The result of path analysis signifies that tillers per metre row length, spikes per spike and grain weight have positive direct effect on grain yield whereas plant height and spikelet per spike have negative direct effect on grain yield. Furthermore, maximum heritability and genetic advance was recorded in grain weight and spikelet per spike. So, this character should be considered as suitable selection criteria for the development of high yielding varieties in wheat.

Keywords: Genetic variability, Correlation coefficient, Path analysis and Iranian wheat landraces

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