

ASSESSMENT OF GENETIC VARIABILITY AND CHARACTER ASSOCIATION IN EXOTIC MAIZE GERMPLASM

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ABSTRACT : Genetic variability was assessed among 16 exotic maize genotypes for Days to 50 per cent silking, Plant height, Number of cobs per plant, Ear length, Ear girth, Number of grain rows per cob, Number of grains per row, Grain yield per plant, 100-seed weight and protein content. High magnitudes of GCV and PCV along with high genetic advances as per cent of mean were observed for grain yield per plant, number of grains per row, 100 grain weight and number of grains per row indicating that the additive type of gene action was operative for the above characters and improvement of these traits may be achieved by phenotypic selection. A positive correlation was found between yield and ear length, ear girth, number of grains per row and test weight. However, it was negatively correlated with protein content.

Key Words: Genetic variability, exotic maize (*Zea mays* L.) genotypes, heritability (broad sense), correlation.