Variability and Genetic Parameter Analysis for Yield and Yield Attributing Characters in Maize (Zea mays L.)

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ABSTRACT

This study was conducted to elucidate the extent of variability and genetic parameters in 41 maize genotypes for fifteen yield and its component characters during *kharif*, 2011. The magnitude of difference between PCV and GCV was relatively low for all most all the traits, indicating less environmental influence. High (> 20 %) GCV and PCV were recorded for grain yield per plant, anthesis- silking interval, ear height, number of grains per row, harvest index, plant height ,100 grain weight and number of cobs per plant. Heritability estimates were found to be high (> 61 %) for grain yield per plant, number of grains per row, plant height, anthesis silking interval, harvest index, number for cobs per plant, ear length ,days to 50% tasselling ,ear height , days to 50% Silking ,100 grain weight and ear girth. High heritability coupled with high genetic advance was observed for grain yield per plant, harvest index ,number of grains per row, ear height, plant height, number of cobs per plant, 100 grain weight and anthesis and silking interval., implying that heritability in the present material is due to additive gene effects and selection may be effective for these characters.

Key words: Genetic advance, Genetic variability, Heritability, Maize.