Variability Estimates for Yield and Yield Components in Maize (Zea mays L.)

T Sandeep Kumar, D M Reddy K H P Reddy and P Sudhakar

Department of Genetics and Plant Breeding, S V Agricultural College, Tirupati 517 502, A P

ABSTRACT

The present investigation was under taken to study the extent of variability and genetic parameters in 36 maize genotypes for fifteen yield and its component characters during rabi, 2010-2011. 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 anthesis-silking interval, leaf area index, number of branches per tassel and grain yield per plant. Heritability estimates were found to be high (>61 %) for all the characters. High heritability coupled with high genetic advance was observed for anthesis-silking interval, leaf area index, plant height, cob length, tassel length, number of branches per tassel, 100-seed weight and grain yield per plant, implying that most likely the heritability is due to additive gene effects and selection may be effective for these characters.

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