Genetic Variability, Heritability and Genetic Advance Estimates in Maize (*Zea mays* L.)

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ABSTRACT

Knowledge on the genetic components of variances and of yield and its yield traits will improve the efficiency of breeding programmes through the use of appropriate selection procedures. Forty inbreds of maize were evaluated in a randomized block design with two replications at Agricultural College, Bapatla for seed yield and yield components. The analysis of variance indicated the presence of sufficient variability for all the traits. Low PCV and GCV were observed for all the traits considered under study. High heritability was observed for days to 50% tasseling, days to 50% silking, number of nodes per plant, plant height, cob height, cob length and 100 seed weight. High heritability with high genetic advance was observed for plant height, cob height, cob length and 100 seed weight which indicated that most likely the heritability was due to the influence of additive genes and selection may be effective for such traits.

Key words: GCV, Genetic advance, Heritability, Maize, PCV.