Genetic Variability, Heritability and Genetic Advance for Yield and Yield Component traits in Pearl Millet [Pennisetum glaucum (L.) R. Br.]

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ABSTRACT

An investigation was carried out to study genetic variability, heritability and genetic advance among 122 genotypes comprised of 99 hybrids with three checks *viz.*, HHB 67 Imp, ICMH 356 and HHB 146-672 and 20 parents of pearl millet for twelve characters based on pooled data of three environments. The results revealed that the difference between PCV and GCV was high for head yield per plant, grain yield per plant, fresh stover yield per plant, dry matter yield per plant and grain harvest index indicating the significant role played by the genotype environment interaction in the phenotypic expression of these traits. High estimates of heritability and genetic advance as per cent of mean were observed for characters plant height, ear length, ear diameter, productive tillers per plant, fresh stover yield per plant and 1000 grain weight indicating that the selection for these traits would be more effective.

Key words: Genetic Advance, Heritability, Pearl millet, Pooled data, Variability.