

Genetic variability, heritability and genetic advance in grain amaranth (*Amaranthus* spp.)

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One hundred germplasm accessions of grain amaranth were evaluated during *Kharif*-2011 for assessing the genetic variability present in the material for grain yield and yield related traits. Analysis of variance revealed significant differences among the genotypes for all the characters studied. High PCV and GCV was observed for stem girth, plant height, panicle length and grain yield per plant. On the other hand, low PCV and GCV were observed for days to maturity and grain protein content. All the traits studied exhibited high heritability. High genetic advance as per cent of mean was observed for days to 50 per cent flowering, stem girth, number of leaves per plant, plant height, panicle length, panicle width and grain yield per plant indicating scope for improvement of the traits of interest through hybridization and selection.

Key words : Heritability, Variability, Genetic advance

How to cite this paper : Venkatesh, L., Murthy, Niranjana, Nehru, S.D. and Manjappa (2014). Genetic variability, heritability and genetic advance in grain amaranth (*Amaranthus* spp.). *Asian J. Bio. Sci.*, 9 (1) : 67-70.