

RESEARCH PAPER

Genetic variability, heritability, genetic advance and character association studies in F_3 generation of cross JK8 x Peddasame (purple late) in little millet (*Panicum miliare* L.)

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Genetic variability, correlation and path analysis was carried out for yield and yield components in 542 F_3 progeny lines developed by crossing JK8 x Peddasame (purple late) in little millet during *Kharif* 2015. Seven biometrical characters were studied for estimating genotypic co-efficient of variation (GCV), phenotypic co-efficient of variation (PCV), genetic advance, heritability (broad sense), genetic advance as per cent of mean, correlation co-efficient and path co-efficient among themselves. High GCV and PCV were observed for number of productive tillers per plant and per plant yield. High heritability was observed for plant height and 1000 seed weight. Number of productive tillers per plant showed maximum genetic advance as per cent of mean followed by grain yield per plant, panicle length and plant height. High heritability coupled with moderate genetic advance as per cent of mean were observed for plant height and 1000 seed weight. Grain yield per plant possessed significant positive correlation with plant height, panicle length, number of productive tillers per plant and 1000 seed weight. Number of productive tillers per plant imparted maximum direct effect on grain yield followed by panicle length, 1000 seed weight and plant height.

Key words : Correlation, Genetic advance, Genotypic co-efficient of variability, Heritability, Path analysis, Phenotypic co-efficient of variability

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