GENETIC DIVERGENCE ANALYSIS IN DOLICHOS BEAN (DOLICHOS LABLAB L.)

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Abstract: An experiment was carried out to identify suitable genotypes for commercial cultivation in Chhattisgarh. Sixty three genotypes of Dolichos bean were evaluated during *kharif* and *Rabi* season of 2009-10. Wide range of variability was observed for all the characters *viz.*, leaf length, leaf width, inflorescence length, number of flower per inflorescence, number of pod per inflorescence, pod length, pod width, number of pod per plant, hundred seed weight and pod yield. The analysis of variance revealed that the high genotypic and phenotypic coefficient of variation were recorded for leaf length (cm), leaf width (cm), inflorescence length (cm), number of flower per inflorescence, pod length (cm), pod width (cm), number of pod per plant, hundred seed weight (g) and pod yield per plant (kg). It was also revealed that relative magnitude of phenotypic coefficient of variation was higher than the genotypic coefficient of variation under the study. Higher heritability coupled with high genetic advance as percent of mean were observed for pod length followed by pod width, length of inflorescence, hundred seed weight, number of flower per inflorescence and number of pods per inflorescence. Correlation and path analysis revealed that number of pod per plant influenced the green pod yield per plant (kg) with high direct effect and significant positive correlation. Through D² analysis, all the genotype could be grouped into six clusters and inflorescence length, number of pod per inflorescence, number of pod per plant and green pod yield per plant were found to be major characters

Keywords: Genetic divergence, Correlation, Path analysis, D² analysis, Dolichos bean

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