GENETIC VARIABILITY, CORRELATION AND PATHCOEFFICIENT ANALYSIS OF SOME YIELD COMPONENTS OF MUNGBEAN (*VIGNARADIATA* L.)

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Abstract: Genotypic and phenotypic coefficient of variation, heritability, genetic advance was evaluated for yield and its contributing characters in 30 moonbeam genotypes significant variations among the genotypes were observed for all the characters. Analysis of variance revealed that mean sum of squares due to genotypes were highly significant for all the characters except number of pod per clusters, 100 seed weight whereas, pod length shown significant differences thus revealing the existence of considerable variability in the material studied. Analysis of Variance was given in table no.4. High heritability coupled with high genetic advance was recorded for seed yield per plant, number of pod per cluster, plant height and days to 50% flowering. Indicating these characters would be best for phenotypic selection. The correlation coefficient analysis revealed high significant positive association of plant height, number of flower per raceme, number of seed per pod, petiole length, number of pod per clusters, pod length, days to 50% flowering and days to maturity and significant positive association of 100 seed weight with seed yield per plant. The path coefficient analysis showed that, days to 50% flowering had the highest direct effect on seed yield. The estimated Genotypic Coefficient of Variation (GCV) and Phenotypic Coefficient of Variation (PCV) helped in getting a clear understanding of the variability present among the various genotypes. The GCV was maximum for seed yield per plant (32.70%). The phenotypic coefficient of variation was high for seed yield/plant (35.43%), number of pod per cluster (21.62%) and plant height (20.64%).

Keyword: Mungbean**,** correlation, variability, path analysis

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