



Genetic variability, correlation and path analysis in Indian bean (*Lablab purpureus* L. Sweet)

R.M. PAWAR* AND R.M. PRAJAPATI

Department of Agricultural Botany, N.M. College of Agriculture, Navsari Agricultural University, NAVSARI
(GUJARAT) INDIA

(Email : ranveer_1972@rediffmail.com)

Abstract : Analysis of variance indicated significant genotypic differences for all the characters under study. The highest GCV was recorded for grain yield per plant followed by number of inflorescences per plant and number of pods per plant. Heritability estimates were high for days to 50% flowering, protein content, days to maturity, pod length and plant height. The expected genetic advance as a percentage of mean was high for grain yield per plant, number of inflorescences per plant, number of pods per plant, pod length and plant height. High heritability coupled with high genetic advance was exhibited by plant height and pod length indicating the presence of additive gene action. Grain yield per plant was found to be positively and significantly correlated with days to 50% flowering, days to maturity, plant height, number of inflorescences per plant and number of pods per plant indicating their usefulness in selection for yield. The traits number of seeds per pod and pod length were negatively and significantly correlated with grain yield. Path analysis revealed highest positive direct effect of number of pods per plant followed by number of seeds per pod, days to 50% flowering, number of inflorescences per plant and 100-seed weight on grain yield per plant, while days to maturity and pod length exhibited high negative direct effects on grain yield per plant.

Key Words : Genetic variability, Correlation, Path analysis, Indian bean

View Point Article : Pawar, R.M. and Prajapati, R.M. (2013). Genetic variability, correlation and path analysis in Indian bean (*Lablab purpureus* L. Sweet). *Internat. J. agric. Sci.*, 9(2): 615-619.

Article History : Received : 14.12.2012; Revised : 13.03.2013; Accepted : 14.04.2013