

## CORRELATION AND PATH ANALYSIS FOR YIELD AND YIELD ATTRIBUTING CHARACTERS IN SOYBEAN (*GLYCINE MAX L.*)

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**Abstract:** A study was conducted at field experiment center of department of Genetics and Plant Breeding, Allahabad School of Agricultural, Sam Higginbottom Institute of Agriculture, Technology and Sciences, Allahabad, U.P. during kharif 2010 on 42 genotypes of soybean to determine the correlation and path analysis of yield and its components. Genotypic correlations were higher than the phenotypic and environmental ones for most of the characters exhibiting high degrees of genetic association among traits under consideration. Correlation coefficient for plant height, number of pods/plant, number of branches/plant, biological yield/plant, seed index, harvest index and days to 50% flowering showing positive significant correlation with grains yield per plant whereas days to maturity and number of grains per pod showing positive non-significant correlation with grain yield per plant at genotypic level.

Path coefficient analysis revealed that biological yield had maximum positive direct effect on grains yield per plant followed by harvest index, pod length, plant height, days to maturity and number of branches per plant.

**Keywords:** Soybean, correlation coefficient, path analysis

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