Correlation and Path Coefficient Analysis of Grain Yield and Yield Component Traits in Maize (Zea mays L.)

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ABSTRACT

An experiment was conducted to study the correlation and path analysis for eleven characters of maize on 45 F_1S , their 18 parents (15 lines and 3 testers) along with two standard checks raised during *kharif*, 2011. Grain yield was found to be significantly and positively correlated with plant height, ear height, ear girth, number of kernel rows per ear, number of kernels per row, 100-kernel weight at genotypic level while days to 50% tasseling and 50% silking and days to maturity recorded negative and significant association with yield. Path analysis at genotypic level revealed that number of kernels per row had exhibited the maximum positive direct effect followed by ear girth, 100-kernel weight, number of kernel rows per ear, plant height, ear length and ear height.

Key words : Correlation, Grain yield, Path analysis, Maize.