

## Correlation studies in temperate maize (*Zea mays* L.) inbred lines

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**ABSTRACT :** The present investigation was conducted to assess the correlation coefficients among fifty maize inbred lines using eleven quantitative parameters viz., days to 50 per cent tasseling, days to 50 per cent silking, days to maturity, plant height, ear height, ear length, ear girth, number of kernel rows/ear, number of kernels/row, 100 grain weight and grain yield/plant during *Kharif* 2014 and 2015. All other possible correlations were positive and significant. Plant height, ear height, ear girth, number of kernel rows/ear, number of kernels/row and 100 grain weight showed positive and significant correlation coefficients with grain yield/ plant at genotypic level hence, direct selection for these traits would be beneficial. Other traits viz., days to 50% tasseling, days to 50% silking and days to maturity were found to have negative and significant association with grain yield hence, suggesting selection of early maturity lines. Ear girth exhibited highest positive correlation with grain yield/plant.

**Key Words :** *Zea mays* L., maize, correlation, yield.