



## RESEARCH PAPER

# Assessment of correlation between yield and its attributing traits in maize

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**Abstract :** The present study was undertaken to assess the character association among the yield and its component traits and also estimate the contribution of various yield contributing characters in Back cross population of maize through the help of correlation analysis. Sixteen Back cross progenies ( $BC_3F_1$ ) of maize were used for this purpose. The twelve biometrical traits viz., days to 50% tasseling, days to 50% silking, plant height, Ear height, Cob length, Cob diameter, Number of rows per cob, Number of kernels per cob, Cob weight, 100 grain weight, Shelling % and Yield per plant were recorded. Results revealed that yield per plant is positively correlated with plant height, Ear height, Cob length, Cob diameter, No. of rows per cob, No. of kernels per cob, Cob weight, 100 grain weight and Shelling. Days to 50% tasseling and days to 50% silking are negatively correlated with yield and other related traits. The correlation co-efficient of No. of rows per cob (0.820\*\*), No. of kernels per cob (0.797\*\*), Cob weight (0.972\*\*), 100 grain weight (0.874\*\*) and Shelling % (0.840\*\*) with yield per plant were about higher in magnitude. This indicated that there was a strong inherent association between characters studied.

**Key Words :** Bio metrical observation, Correlation co-efficient, Yield characters

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