



## RESEARCH PAPER

# Character association and path analysis studies on seed yield and its yield attributing traits in *Kharif* sesame (*Sesamum indicum* L.)

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**Abstract :** The experiment was carried out to determine the character association and path analysis with 20 genotype including national check namely GT-10, TKG-22, zonal check JTS-8. The genotype was grown in (RBD) design with 3 Replication during *Kharif* 2020 at BTC College of Agriculture and Research station Bilaspur CG. The data were collected for nine quantitative and yield attributing traits. The correlation co-efficient analysis is the index of relationship among two variables. These have been dealing in all possible combinations for important traits at genotypic and phenotypic levels. Seed yield plant<sup>-1</sup> was highly significant and positively correlated with plant height, followed by number of primary branches plant<sup>-1</sup>, capsules length, number of capsules plant<sup>-1</sup>, number of seed capsule<sup>-1</sup> days to maturity at genotypic and phenotypic levels. Path analysis at phenotypic level among the characters studied, plant height (cm) had the highest direct effect (0.7479) towards seed yield per plant followed by number of primary branches plant<sup>-1</sup> (0.5868) capsule length (0.3827) no of capsule plant<sup>-1</sup> (0.3521) number of seed capsule<sup>-1</sup> (0.2818) days to maturity (0.289) negative direct effect were recorded for days to 50% flowering (-0.0327) 1000 seed weight (-0.02147). Demonstrating the fact that there was a real and positive connection between these characters will help determine which type of character is needed for crop improvement.

**Key Words :** Correlation, Path analysis, Sesame

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