

# GENETIC VARIABILITY, CORRELATION COEFFICIENT AND PATH ANALYSIS STUDIES IN FENUGREEK (*TRIGONELLA FOENUM-GRAECUM* L.)

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**Abstracts:** Fenugreek (*Trigonella foenum-graecum* L.) is an annual autogamous crop grown as seed spice in India. Hence, the present investigation was undertaken. With this objective an investigation was laid out in Randomized Block Design with three replications at the main experiment station of Department of Vegetable Science, Narendra Deva University of Agriculture and Technology, Kumarganj, Faizabad (U.P.) in India grown during winter. Thirty-one genotypes of fenugreek (*Trigonella foenum-graecum* L.) were assessed for a phenotypic coefficient of variance (pcv), genotypic coefficient of variance (gcv), heritability and genetic advance as percentage of mean for growth, yield attributes and yield. The results reveals that the higher magnitude of coefficient of variation at genotypic level was observed for number of pods per plant, number of branches per plot, number of seeds per pod, plant height, seed yield per plant, yield (q/ha), length of pod whereas at phenotypic level, number of pods/plant, number of branches per plant, number of seeds per pod, plant height, seed yield per plant yield (q/ha) and length of pod revealed high magnitude of coefficient of variation. The indicated possibility of obtaining very high selection response in respect of these traits. In this way, high values of genotypic and phenotypic coefficient of variation was also observed in fenugreek for plant height, days to flowering, branches per plant and test weight and low for pod length, when studied with 22 genotypes in field condition and high genotypic coefficient of variation for number of secondary branches, number of pods per plant and seed yield was observed in fenugreek [Banerjee and Kole, 2004 and Datta *et al.*, 2005]. It is also reported that high heritability for pods per plant, pod length and seed yield, while low heritability was observed for seeds per pod and test weight (Meena, 1994).

**Keywords:** Genetic, Correlation, Fenugreek, *Trigonella foenum-graecum* L.

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