

ASSESSMENT OF GENETIC COMPONENTS OF VARIATION IN F<sub>2</sub> GENERATION OF LINSEED (*LINUM USITATISSIMUM* L.)

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**Abstract:** 15 F<sub>1</sub>, s and 6 parents were evaluated during *rabi* 2011-12 in randomized block design with three replications. The present study has been carried out to assess the genetic parameters through F<sub>2</sub> diallel populations along with the six parents. The estimates of components D was noted highly significant for number of primary branches per plant and plant height. The dominance components H<sub>1</sub> and H<sub>2</sub> were highly significant for days to maturity, number of primary branches per plant, number of capsules per plant, number of seeds per plant, 100 seed weight and seed yield per plant. Estimates of H<sub>1</sub> and H<sub>2</sub> were found to be significant for number of secondary branches per plant and number of seeds per capsule. Parameters of genetic variation in F<sub>2</sub> generation suggested that the characters viz. days to 50% flowering, plant height, number of secondary branches per plant, number of seeds per capsule and 100 seed weight were governed by over dominance. The ratio of KD/KR pertains to relative distribution of dominance and necessary genes appeared more than unity for days to 50% flowering, days to maturity and 100 seed weight. The ratio of h<sub>2</sub>/H<sub>2</sub> was recorded more than 0.5 for number of primary branches per plant, number of capsules per plant, number of seeds per plant and seed yield per plant. The heritability estimates in this analysis recorded high for plant height followed by days to 50% flowering.

**Keywords:** Linseed, Diallel, Combining ability, Genetic components

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