

Estimation of genetic components of quantitative traits in two crosses using generation mean analysis in linseed (*Linum usitatissimum* L.)

Kiran¹, Amit Kanawjia² and R.K. Kanojia³

Received May 11, 2014 and Accepted September 22, 2014

ABSTRACT : The research was carried out in the Department of Crop Improvement, CSK HPKV, Palampur and Research Stations Kangra and Kukumseri, India during the years 2007-08 to 2010-11 using generation means analysis derived from two crosses of Surbhi x KL-243 and Janaki x KL-243 to study the nature of gene action for seed yield and other traits. The experimental material comprising P₁, P₂, F₁, F₂, BC₁ and BC₂ generations were evaluated in Compact Family Randomized Block Design with three replications. It was concluded that both additive and non additive type of gene action was responsible for the inheritance of different characters and dominance component [h] showed the largest magnitude in most of the characters in the two crosses studied at both the locations.

Key Words: Linseed (*Linum usitatissimum* L.), gene effects, yield, epistasis.