## Generation Mean Analysis for Seed Yield and Yield Traits in Sesame (Sesamum indicum)

J V Ramana, V Satyanarayana Rao, M Lal Ahamed, Y Ashoka Rani and P Anil Kumar Department of Genetic & Pland Breeding, Agricultural College, Bapatla 522 101, Andhra Pradesh

## **ABSTRACT**

Six parents, five F<sub>1</sub>s, five F<sub>2</sub>s and five F<sub>3</sub>s of sesame were evaluated for nine characters *viz.*, days to 50% flowering, days to maturity, plant height, number of primary branches/plant, number of capsules per plant, number of seeds per capsule, 1000 seed weight, oil content and seed yield per plant to study the gene action during *rabi* 2012-13 at Agricultural Research Station, Yallamanchili, Andhra Pradesh. The results of generation mean analysis of various seed yield and yield components of ten crosses showed very less variability in the material for most of the characters in terms of mean values. The results of C and / or D scaling tests were significant for all the crosses indicating the presence of epistatic interactions in all the crosses for all the traits. Complementary epistasis for yield and oil content was observed in the crosses YLM 89 x YLM 92 and YLM 95 x YLM 92 while, duplicate type of epistasis was noticed in the cross YLM 93 x YLM 92.

Key words: *Epistasis, Generation mean analysis, Sesame.*