



Studies on Genotype x Environment Interaction for Some Traits of Economic Importance in Lentil

R.K. Gill, Manpreet Singh, Sarvjeet Singh and Sunita Sharma

*Department of Plant Breeding and Genetics
Punjab Agricultural University, Ludhiana 141004
E-mail: ranjit.gill@rediffmail.com*

Abstract: Sixteen lentil genotypes including seven small-seeded and nine bold seeded were evaluated for yield components and protein content at two sowing dates and two fertilizer levels during *rabi* 2007-08 and 2008-09. Data were recorded on days to maturity, plant height (cm), 100-seed weight (g) and grain protein content (%). The ANOVA of factorial experiment in split plot design showed that dates of sowing (DOS) interacted significantly with almost all the traits under study. The genotypes exhibited significant interactions for all the traits studied in all growth environments during both years. The timely sown crop showed increased trend for days to maturity, plant height and 100- seed weight whereas, under late sown conditions significant increase for grain protein content was recorded. The higher fertilizer dose significantly increased plant height, whereas, other traits remained unaffected. The genotypes least affected due to date of sowing or level of fertilizer for their performance for various traits were also identified.

Key Words: Lentil, Genotype x Environment Interaction, Planting Time, Fertilizer Level
