

Influence of G x E interaction on seed yield and related traits in maize

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ABSTRACT

Thirteen maize hybrids along with two checks were evaluated under six locations spreading over different agro-climatic zones of Himachal Pradesh during *Kharif* 2007 for stability parameters with respect to seed yield and other traits. Pooled analysis of variance indicated the presence of considerable variability among the genotypes as well as environments with respect to the characters studied. Significant mean squares for hybrid x environment (H x E) interaction revealed the differential response of hybrids over environments for all the characters. The partitioning of environment + (hybrid x environment) mean squares further confirmed the existence of significant variation among the environments with regard to their effect on the performance of hybrids for all the traits. The hybrid X-717, having high mean yield and average stability exhibited general adaptability for seed yield whereas, three hybrids DMH-829, X-789 and NMH-51 showed general adaptability for early silking and maturity across the environments in the state. It was concluded that plasticity of different components be taken into consideration while selecting for stability in yield and related traits.

Key words : Maize, Hybrid x environment interaction, Regression, Stability

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