

Genetic Diversity For Grain Yield And Physiological Parameters Under Mild Water Stress Condition in Maize (*Zea mays* L.)

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ABSTRACT

The extent of genetic divergence between genotypes in the present experimental material was observed by Mahalanobis D^2 analysis. In the present investigation based on D^2 analysis, 49 genotypes were grouped into 8 clusters. The magnitude of D^2 values suggested that there was considerable amount of diversity in the experimental material used in investigation. Maximum divergence was found between cluster III and VIII, suggesting that the genotypes in these clusters could be fully exploited to explore the wide range of heterosis and to release good recombinant lines by intermating them in a definite design.

Key words : Maize D^2 analysis Cluster analysis Mild Water stress condition.