

Evaluation of genetic diversity in Mexican wheat (*Triticum aestivum* L.) genotypes for qualitative and quantitative traits

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Received May 17, 2013 and Accepted July 29, 2013

ABSTRACT : Genetic diversity of the thirty Mexican wheat (*Triticum aestivum* L.) genotypes were evaluated on the basis of ten different traits in randomized block design during *Rabi* season. These genotypes were grouped into six different clusters by using Mahalanobis D^2 analysis. Cluster V had maximum number of (12) genotypes while, cluster I had only one genotypes. Distribution pattern of all the genotypes into various clusters showed the presence of considerable genetic divergence among the genotypes for most of the traits studied. Maximum generalized distances were observed between clusters I and VI. Yield per plant, gluten content (%) and plant height showed maximum contribution to the total genetic divergence. The genotypes present in cluster I and VI may be used as parents in hybridization programmes to develop high yielding wheat varieties.

Key Words: Divergence, wheat, cluster, gluten content, genetic improvement.