

# Genetic Divergence in Introgressed Lines of Cotton

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## ABSTRACT

In order to assess the divergence among sixty two introgressed lines developed through wild species of *Gossypium* at different Cotton Research Centres across the country and four local checks in American Cotton, Mahalanobis  $D^2$  statistic was applied. The study revealed the existence of considerable amount of diversity. These genotypes were grouped into six clusters. Clusters I, V, III and II had 40, 11, 7 and 4 genotypes respectively. Cluster VI had three genotypes while cluster IV had one genotype only. The genotypes falling in cluster V had the maximum divergence followed by cluster VI and cluster II. Maximum inter cluster distance was observed between cluster II and cluster VI and genotypes included in these clusters had maximum divergence. The cluster VI exhibited high mean values for most of the traits. The character bundle strength contributed maximum (42.05%) to the divergence followed by 2.5% span length (17.90%) and seed cotton yield per plant (9.09%).

**Key words :** Cotton, Divergence, Introgressed lines.