

Genetic Divergence in Upland Cotton (*Gossypium hirsutum* L.)

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ABSTRACT

Genetic diversity in sixty three genotypes of cotton (*Gossypium hirsutum* L.) assessed using Mahalanobis D^2 statistic. The genotypes were grouped into eight clusters. Fiber length, fiber strength, boll weight and uniformity ratio contributed maximum towards genetic divergence. The genotypes of clusters V and II can be utilized in the breeding programme to develop heterotic hybrids. All the five principal components showed eigen values more than 1 and they together explained 93.91% of the variability.

Key words : Cluster analysis, Cotton, Genetic Diversity, Mahalanobis' D^2 statistic, Principal Component analysis.