Genetic Divergence in Upland Cotton

D Krishna Kishore, M Gopinath, V Satyanarayana Rao and V Srinivasa Rao Department of Genetics and Plant Breeding, Agricultural College, Bapatla 522 101, Andhra Pradesh

ABSTRACT

Genetic divergence as measured by Mahalanobis D^2 statistic was assessed among 60 genotypes of Upland cotton for eleven characters. The pattern of distribution of genotypes into different clusters was at random. The seed index contributed maximum towards genetic divergence followed by seed cotton yield per plant, plant height, boll weight and number of bolls per plant. The maximum inter-cluster distance was observed between clusters 3 and 6 (1671.909) followed by clusters 2 and 6 (1291.112) and clusters 6 and 8 (1241.931). The genotypes from these clusters can be utilized in cotton improvement programmes.

Key words: Cluster analysis, Cotton, Divergences, D^2 Analysis, Principal component analysis.