IMPACT: International Journal of Research in Applied, Natural and Social Sciences (IMPACT: IJRANSS) ISSN (P): 2347-4580; ISSN (E): 2321-8851

Vol. 6, Issue 8, Aug 2018, 1-4

© Impact Journals



GENETIC DIVERGENCE IN GERMPLASM OF GROUNDNUT

(ARACHIS HYPOGEAE L.)

Dinesh Kumar Jain¹, S. K. Jain² & Raj Kumar Nagar³

^{1,3}Plant Manager, Maharana Pratap University of Agriculture and Technology,

Udaipur, Rajasthan, India

²Associate professor, Maharana Pratap University of Agriculture and Technology,

Udaipur, Rajasthan, India

Received: 24 Jul 2018 Accepted: 28 Aug 2018 Published: 04 Aug 2018

ABSTRACT

Genetic divergence among 35 genotypes of Spanish bunch groundnut was estimated using Mahalanobis D² statics for 14 quantitative and qualitative characters. The analysis of variance revealed a significant difference among the genotypes for all characters. Based on Tocher's method 35 genotypes were grouped into eight clusters, where cluster I was largest containing 9 genotypes followed by cluster II and IV with 8 and 6 genotypes, respectively. The cluster VIII was having maximum inter-cluster distance with cluster I, cluster VI and Cluster VII followed by cluster V and VII, cluster II and VI and Cluster II and III. The intra-cluster distance was maximum in cluster VII followed by II and IV. Considering the cluster distance and cluster mean genotypes of cluster VIII, V, VI and III could be selected for hybridization programme.

KEYWORDS: D², Genetic Divergence, Groundnut etc