

## D<sup>2</sup> ANALYSIS IN ADVANCED BREEDING LINES OF GREENGRAM (*VIGNA RADIATA* L.)

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**Abstract:** Genetic divergence studies are very important to devise a hybridization strategy to exploit the variability present in the base population. In the present study, thirty genotypes of advanced breeding lines of greengram were evaluated to know divergence and use it the hybridization programme based on the inter cluster and high mean values of the clusters. The thirty genotypes were grouped into ten clusters. The cluster I was the largest cluster with 13 genotypes followed by the cluster, II (6) and III (4). The clusters, IV to X were solitary clusters with single genotype each. The contribution of test weight towards divergence was maximum (78.39%) compared to other characters. The intra cluster distance was maximum in the cluster III (22.83) followed by the cluster II (21.52) and I (15.56). The inter cluster distance was maximum between the clusters VI and X (753.22) followed by IV and X (717.11), VII and X (552.56) and I and X (531.27) indicating their importance in the hybridization programmes for the generation of transgressive segregants. The cluster X mean value for test weight was maximum and can be utilized in the breeding programmes as it forms an important yield contributing trait for yield improvement.

**Keywords:** Advanced breeding lines, Divergence, Greengram

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