

RESEARCH ARTICLE

Genetic diversity studies in pigeonpea (*Cajanus cajan* L. Millsp.)

■ S. D. Atkare, S. B. Sarode, S. G. Gawai and S. L. Haloli

SUMMARY

Genetic diversity using Mahalanobis D-square (D^2) techniques was studied for yield and yield contributing traits of 100 genotypes of pigeonpea. These genotypes were grouped into nine clusters. The greatest distance between two clusters was existed between cluster VII and III (727.38) indicating greatest divergence, followed by cluster VIII and III (630.51), cluster IX and V (604.66), cluster V and III (580.32) and cluster VIII and V (573.60). Whereas the least distance was recorded between cluster V and IV (71.57) followed by cluster III and II (122.10), cluster IV and I (217.85), cluster II and I (219.33) indicating least genetic divergence among genotypes. The intra cluster values varied from 0.00 to 139.00. The maximum intra-cluster distance was noticed in cluster I (139.00).

Key Words : Pigeonpea, Genetic diversity, Clustering pattern, D^2 statistics

How to cite this article : Atkare, S.D., Sarode, S. B., Gawai, S. G and Haloli, S. L. (2024). Genetic diversity studies in pigeonpea (*Cajanus cajan* L. Millsp.). *Internat. J. Plant Sci.*, 19 (1): 43-47, DOI: 10.15740/HAS/IJPS/19.1/43-47, Copyright@ 2023:Hind Agri-Horticultural Society.

Article chronicle : Received : 21.10.2023; Revised : 20.11.2023; Accepted : 19.12.2023

MEMBERS OF THE RESEARCH FORUM

Author to be contacted :

S. B. Sarode, Department of Agricultural Botany, College of Agriculture (V.N.M.K.V.), **Badnapur (M.S.) India**
Email : shrisarode24@gmail.com

Address of the Co-authors:

B. H. Kale, S. G. Gawai and S. L. Haloli, Department of Agricultural Botany, College of Agriculture (V.N.M.K.V.), **Badnapur (M.S.) India**