

Genetic variability, heritability and genetic advance in vegetable cowpea [*Vigna unguiculata* (L.) Walp]

■ G.K. SAPARA, R.M. JAVIA AND M.V. POKAR

SUMMARY

Studies on genetic variability, heritability and genetic advance were carried out with forty genotype of cowpea [*Vigna unguiculata* (L.) Walp] for 12 traits. Significant differences among the genotypes for all the characters studied except pod width indicating existence of ample variability in the experimental material for all the characters. High to moderate range of variation was observed for important yield components. The estimates of genotypic and phenotypic co-efficient of variation were high for number of pods per plant, 100 fresh seed weight, plant height, 10 pod weights and green pod yield per plant. The values of phenotypic co-efficient of variation were higher than their genotypic co-efficients of variation for all the characters indicating the influence of environmental factors. High heritability along with high genetic advance expressed as percentage of mean and high genotypic co-efficient of variation was observed for number of pods per plant, 100-fresh seeds weight, 10-pods weight, green pod yield per plant, plant height indicating scope for improvement by selection and breeding programme.

Key Words : Cowpea, Genetic variability, Heritability, Genetic advance

How to cite this article : Sapara, G.K., Javia, R.M. and Pokar, M.V. (2014). Genetic variability, heritability and genetic advance in vegetable cowpea [*Vigna unguiculata* (L.) Walp]. *Internat. J. Plant Sci.*, **9** (2): 326-329.

Article chronicle : Received : 12.02.2014; Revised : 24.04.2014; Accepted : 08.05.2014

MEMBERS OF THE RESEARCH FORUM

Author to be contacted :

R.M. JAVIA, Krishi Vigyan Kendra (J.A.U.), Nana-Kandhasar (Chotila),
SURENDRANAGAR (GUJARAT) INDIA
Email: rmjavia@gmail.com

Address of the Co-authors:

G.K. SAPARA AND M.V. POKAR, Krishi Vigyan Kendra (J.A.U.),
Nana-Kandhasar (Chotila), SURENDRANAGAR (GUJARAT) INDIA