

Research Article

Genetic variability and character association in finger millet [*Eleusine coracana* (L.) Gaertn]

S.R. SHINDE, S.V. DESAI AND R.M. PAWAR

SUMMARY

Forty-one genotypes of finger millet were assessed for genetic variability, heritability and character association for 12 important traits. High genotypic co-efficient of variation (GCV) and phenotypic co-efficient of variation (PCV) was observed for productive tillers/plant followed by grain yield/plant and iron content. High estimates of heritability (83.40 - 99.30%) was obtained for all the characters studied except protein content (70.40%). Productive tillers/plant, seed yield/plant and iron content exhibited high heritability coupled with high genetic advance as per cent of mean, indicating that these characters are governed by additive gene effects. Hence, selection for these traits would be more effective. High heritability accompanied by low genetic advance as per cent of mean observed for harvest index, it may be due to non-additive gene effects. Correlation analysis revealed that grain yield/plant was positively and significantly correlated with productive tillers/plant, plant height, finger length and number of fingers/main ear head at both genotypic and phenotypic levels, indicating that grain yield would be improved through these characters.

Key Words : Genetic variability, Correlation, Finger millet

How to cite this article : Shinde, S.R., Desai, S.V. and Pawar, R.M. (2014). Genetic variability and character association in finger millet [*Eleusine coracana* (L.) Gaertn]. *Internat. J. Plant Sci.*, **9** (1): 13-16.

Article chronicle : Received : 01.07.2013; Revised : 16.09.2013; Accepted : 02.10.2013

- MEMBERS OF THE RESEARCH FORUM

Author to be contacted :

R.M. PAWAR, Department of Agricultural Botany, Bharati Vidyapeeth's Loknete Mohanrao Kadam College of Agriculture, Kadegaon, SANGLI (M.S.) INDIA

Email: ranveer_1972@rediffmail.com

Address of the Co-authors: S.V. DESAIAND R.M. PAWAR, Department of Agricultural Botany, Bharati Vidyapeeth's Loknete Mohanrao Kadam College of Agriculture, Kadegaon, SANGLI (M.S.) INDIA

Email: sshivaji87@yahoo.in; sanjivani.desai@yahoo.com