

RESEARCH ARTICLE

Genetic variability, heritability and genetic advance in *Triticum aestivum*

■ Kamalpreet Pannu, Geetika Singh and Manoj Kumar

SUMMARY

The present investigation was carried out to study gene action, heterosis, correlations, variance, genetic advance, heritability using diallel mating design at Research farm, Department of Agriculture, Mata Gujri college, Fatehgarh sahib during *rabi*, 2016-17 and 2017-18. The experiment was carried out in Randomized Block Design and observations were recorded on fifteen characters. The best heterotic cross for grain yield per plant was Kalyan Sona × WH-1080 followed by PDW-215 × CPAN-1796, Kalyan Sona × CPAN-1796, DBW-90 × PDW-215, DBW-90 × WH-1080 and Kalyan Sona × DBW-90. Results revealed that grains per plant showed highly significant and positive genotypic correlations with days to booting, days to heading, spike length, plant height, harvest index and peduncle length. The experimental materials for the present investigation consisted of five lines *viz.*, Kalyan sona, WH-1080, PDW-215, DBW-90 and CPAN-1796 and one check *viz.*, PBW-725.

Key Words : Diallel, Heterosis, Harvest index, Variance

How to cite this article : Pannu, Kamalpreet, Singh, Geetika and Kumar, Manoj (2021). Genetic variability, heritability and genetic advance in *Triticum aestivum*. *Internat. J. Plant Sci.*, 16 (2): 160-164, DOI: 10.15740/HAS/IJPS/16.2/160-164, Copyright@ 2021: Hind Agri-Horticultural Society.

Article chronicle : Received : 21.04.2021; Revised : 05.05.2021; Accepted : 08.06.2021

MEMBERS OF THE RESEARCH FORUM

Author to be contacted :
Geetika Singh, Chandigarh Group of Colleges, Jhanjeri, Mohali (Punjab) India
Email : geetika_phd@yahoo.com

Address of the Co-authors:
Kamalpreet Pannu and Manoj Kumar, Chandigarh Group of Colleges, Jhanjeri, Mohali (Punjab) India