

VARIABILITY AND CORRELATION STUDIES UNDER MOISTURE STRESS CONDITION IN INDIAN MUSTARD [*BRASSICA JUNCEA* (L.) CZERN. & COSS.]

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Received-01.10.2019, Revised-22.10.2019

Abstract: Diverse genotypes of Indian mustard *Brassica juncea*. L with three checks were evaluated in Completely Randomised Design for different morphological characters under two conditions Non-moisture stress (Env.I) and Moisture Stress (Env.II) during Rabi 2014-15. Significant differences were observed among the genotypes for all the characters studied under both the conditions. In Env.I, analysis of variance revealed that mean squares due to genotypes were significant for all the parameters except number of primary branches per plant and seeds per siliqua. On the other hand in Env.II, analysis of variance revealed that mean squares due to genotypes were significant for all the parameters except days to 75 per cent maturity, siliqua length and seeds per siliqua. All the characters under study had exhibited a broad range of variability. The phenotypic Coefficient of Variance values was found to be higher than their corresponding GCV values. High heritability coupled with high genetic advance was observed for all the growth parameters viz, siliquae per plant, length of main shoot and siliquae on the main shoot. Seed yield per plant had a positive correlation with length of the main shoot, siliqua length, seeds per siliqua, 1000-seed weight, biological yield per plant and harvest index under moisture stress condition whereas under non-moisture stress condition seed yield per plant had significant positive associations with siliquae per plant, seeds per siliqua and harvest index.

Keywords: Heritability, Correlation, Moisture Stress, Genetic advance

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