Estimation of Variability and Genetic Diversity in Indian Mustard Germplasm (*Brassica juncea* L.)

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ABSTRACT

The genetic variability and divergence among 41 Indian mustard (*Brassica juncea* L.) genotypes were assessed for 12 characters. High to moderate estimates of GCV and PCV were exhibited by siliqua plant ⁻¹, harvest index and biological yield plant ⁻¹. High estimates of heritability and genetic advance were observed for plant height and harvest index. High estimate of genetic gain was observed for siliqua plant ⁻¹, harvest index and biological yield plant ⁻¹. Forty one genotypes were grouped into seven clusters. The cluster II had the maximum number of genotypes. The maximum inter-cluster distance was observed between cluster III and VI and cluster VI and VII and cluster III and VII. Thus, genotypes present in cluster III and VI and VII like Raya, CS54, Sivalik, Krishna, NDRE 4, Urvasi, Ganga Kaveri Vijay may be used in hybridization programme to obtain superior segregants for yield improvement in Indian mustard.

Key words: Heritability, GCV, Genetic Diversity, Genetic Gain, PCV, Mustard, Variability