



RESEARCH PAPER

Genetic variability studies in brown sarson (*Brassica rapa* L.) genotypes for yield and yield attributing traits under temperate conditions of Kashmir

Shahina A. Nagoo*, Tahmeena Bano¹, Z.I. Buhroo, Sabiha Ashraf, Shabeena Majeed², Sabina Naseer²
and Sabiya Bashir²

College of Temperate Sericulture (SKUAST-K), Mirgund (J&K) India
(Email: shahinanagoo.sn@gmail.com)

Abstract : The present study was carried out with 57 genotypes of brown sarson (*Brassica rapa* L.) during Rabi 2019-2020. Estimation of the genetic variability, heritability, genetic advance and correlation analysis in the set of 57 *B. rapa* lines revealed that all the characters exhibited large amount of variability. The high amount of PCV and GCV along with high values of broad sense of heritability and genetic advance was found, no. of seeds per siliqua, no. of siliqua per plant followed by seed weight. The association analysis showed that the no. of seeds per siliqua, siliqua length, no. of siliqua per plant and seed weight had significant positive correlation with seed yield plot⁻¹. The difference between PCV and GCV were observed low for all the traits. The genetic variability present in the set of breeding material shall not only provide a basis for selection but also provided some valuable information regarding selection of diverse parents to be used in the hybridization programme. Hence, In the present study, significant amount of differences were observed in the studied genotypes for all characteristics which give an insight into the existence of genetic variation in the available genotypes and thus, there is a great scope for selection and further improvement of *Brassica rapa* L. in terms of quality and quantity .

Key Words : Brown sarson (*Brassica rapa* L.), Genetic, Genotypes, Kashmir, Temperate, Variability, Yield

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* **Author for correspondence :**

¹Faculty of Agriculture (SKUAST-K), Wadura (J&K) India

²Dryland Agriculture Research Station (SKUAST-K), Budgam (J&K) India