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ASSESSMENT OF GENETIC VARIABILITY OF SOME NEWLY DEVELOPED WHITERUST RESISTANT LINES OF INDIAN MUSTARD (B.JUNCEA L.)

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ABSTRACT

108 white rust resistant lines of Brassica juncea derived from Brassica napus and Brassica carinata evaluated with three checks viz. NRCDR02, Rohini, and NRCHB101 for 19 characters through PCV, GCV, heritability, correlation and path analysis. Length of secondary branch had highest PCV and GCV followed by number of secondary branch, number of pod on secondary branch. Number of secondary branch showed highest heritability followed by plant height and first effective branch. Number of secondary branch showed highest GAM followed by length of secondary branch. Plant height, number of primary and secondary branches per plant, length of main shoot, primary branches and secondary branches, number of siliqua on main shoot, primary branch and secondary branch, number of seed per pod, 1000-seed weight, biological yield per plant, harvest index and days to maturity presented positive and significant correlation with seed yield per plant at both phenotypic and genotypic level. Path analysis revealed that number of seed per siliqua had highest positive direct effect onseed yield per plant followed by siliqua on main shoot, siliqua on primary branch, siliqua on secondary branch, pod angle and 1000-seed weight also had positive direct effect on seed yield per plant.

KEYWORDS: *Brassica Juncea, Siliqua, Primary branches and Secondary Branches*

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