



Early generation selection parameters in doubled haploids of Ethiopian mustard (*Brassica carinata* A. Braun)

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Abstract : The doubled haploids of Ethiopian mustard (*Brassica carinata* A. Braun) were evaluated along with mustard under two environments during *Rabi*, 2010-11. Analysis of variance for different traits such as days to flower initiation, days to 50 per cent flowering, days to 75 per cent maturity, plant height, number of primary branches per plant, number of secondary branches per plant, siliquae per plant, length of main shoot, siliquae on main shoot, siliqua length, seeds per siliqua, 1000-seed weight, seed yield per plant, biological yield per plant, harvest index and per cent oil content revealed the presence of sufficient genetic variability for all characters except siliqua length and per cent oil content in Env. I. On the other hand in Env. II, the presence of sufficient genetic variability for most of the traits was observed. Pooled analysis over environments revealed the presence of g x e interactions for all characters except days to flower initiation and per cent oil content. Correlation studies indicated the higher magnitude of genotypic correlations than their corresponding phenotypic correlations for most of the characters studied indicating the inherent association among the various characters. In pooled over the environments, at phenotypic level, the seed yield per plant had significant positive association with plant height, number of secondary branches per plant, siliquae per plant, biological yield per plant and harvest index. Based upon the path coefficient analysis, harvest index and biological yield per plant were observed to be the best selection parameters because of their high positive direct and indirect contributions towards seed yield per plant.

Key Words : Correlation, Ethiopian mustard, Genetic variability, Path co-efficient analysis

View Point Article : Rajesh, M., Senthil, T. and Prabakar, K. (2014). Characterization of seed borne *Fusarium* sp. biodiversity in major cereals through morphological and molecular basis. *Internat. J. agric. Sci.*, **10** (1): 286-290.

Article History : Received : 26.07.2013; Revised : 21.10.2013; Accepted : 19.11.2013

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