



Research Paper

Article history :

Received : 26.10.2013

Revised : 13.04.2014

Accepted : 24.04.2014

Generation mean analysis of yield and its components in muskmelon (*Cucumis melo* L.)

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ABSTRACT : The nature and magnitude of gene action was analysed in six generation mean for yield related characters of five crosses in muskmelon. Study indicated that magnitude of dominance effect was higher for almost all the five cross combinations for the characters viz., number of female flowers, days required for first harvest of fruits, number of fruits per vine, yield per vine, and weight of fruit. The additive and additive x dominance effects were equally important in some combination for most of the characters. Dominance x dominance gene effects were greater magnitude followed by additive x additive and additive x dominance for node at which days required for first harvest of fruit, fruit weight, respectively in both summer and *Kharif* season. The selection for these characters should be postponed to later generation. The gene effects revealed that there was predominance of dominance gene effects for most of the characters in most of the all combinations. Duplicate type of epistasis was observed for most of the crosses. Significant epistatic gene effects coupled with duplicate epistasis indicated that through effective selection, exploitation of heterosis breeding.

KEY WORDS : Generation mean analysis, Yield characters, Non-allelic interaction

HOW TO CITE THIS ARTICLE : Patil, Dinar, S., Musmade, A.M. and Jagtap, V.S. (2014). Generation mean analysis of yield and its components in muskmelon (*Cucumis melo* L.). *Asian J. Hort.*, **9**(1) : 81-88.