## GENETIC VARIABILITY STUDIES IN CHILLI (CAPSICUM ANNUUML.)

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**Abstract:** The present studies were carried out to assess the genetic variability, heritability and genetic advance for different characters in nine genotypes (six lines and three testers) in diverse genotypes of Chilli. The experiment was conducted in RandomisedBlock Design (RBD) with three replications during the *rabi* season 2011-2012 at Department of Horticulture under All India Coordinated research Project on Vegetable Crops, Indira Gandhi KrishiVishwavidyalaya, Raipur (C.G.), India. The analysis of variance indicated the sufficient genetic variation among the genotypes from all the characters studied. Among the genotypes KA-2 (580 g/plant) was the highest green fruit yielder. Number of fruits/plant was highest in Indira Chilli-1 (191.00), fruit length was maximum in 2011-03 (10.37 cm) and average per fruit weight in 2011-03 (4.77 g). The high phenotypic coefficient of variation and genotypic coefficient of variation were observed for fruit length, number of seeds/fruit, plant height and fruit weight. High heritability coupled with high genetic advance were observed for all characters studied, except number of primary branches, number of secondary branches, days to first picking, fruit bearing period, fruit width, duration of crop (sowing to last harvest days) indicating these characters are governed by additive gene action.

Keywords: Genetic variability, Genetic advance, Heritability, Capsicum annuum

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