

Combining ability studies for specific metric traits of bottle gourd (*Lagenaria siceraria* (Molina) Standl.)

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ABSTRACT : Line x Tester study was conducted in bottle gourd during summer 2008 and kharif 2008 at Zonal Agriculture Research Station, Chhindwara, centre of Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur. It was observed that the estimates of specific combining ability variances were higher in magnitude than general combining ability variances for all the characters, indicated that the predominance of non-additive type of gene action. The estimate of general combining ability effects showed that JBG 9 was a good general combiner for all the characters except for days to appearance of first male flower, number of female flowers per plant and fruit setting per cent. Estimates of specific combining ability effects revealed that five crosses viz., JBG4 x T1 (Pusa Naveen), JBG6 x T1 (Pusa Naveen), JBG9 x T1 (Pusa Naveen), JBG5 x T3 (PSPL) and JBG11 x T3 (PSPL) were the best specific combiners for yield and major yield components.

Key Words : Bottle gourd, combining ability, specific combining ability, general combining ability.