



## Research Paper

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# Combining ability analysis for fruit yield and its component characters in mild pungent chilli (*Capsicum annuum* L.)

■ A.L. PATEL<sup>1</sup>, K.B. KATHIRIA<sup>2</sup>, B.R. PATEL<sup>3</sup> AND H.N. LEUA

### Members of the Research Forum

#### Associated Authors:

<sup>1</sup>Main Vegetable Research Station  
(A.A.U.), ANAND (GUJARAT) INDIA

<sup>2</sup>Anand Agricultural University,  
ANAND (GUJARAT) INDIA

<sup>3</sup>Department of Biotechnology,  
Anand Agricultural University,  
ANAND (GUJARAT) INDIA

#### Author for correspondence :

H.N. LEUA

Department of Horticulture, Anand  
Agricultural University, ANAND  
(GUJARAT) INDIA

Email : hasmukh.leua@yahoo.com

**ABSTRACT :** Chilli is a high value crop grown commercially in almost all parts of India for its large green blocky fruits which are used as vegetable. The demand for its fruits is increasing with ever increasing population. A 8 X 8 half diallel set involving diverse parents was studied. The present study revealed that even though none of the parents were good general combiners for all the traits. The parents IVPBC-535 and SG-5 that were good general combiners for most of the traits which, could be used in future breeding programme in chilli for obtaining desirable segregants. The sca effects in general are relatively less significant in self pollinated crops like chilli. However, cross combinations with high degree of sca effects involving both the parents having good gca effects would be ideal for deriving desirable genotypes in advance generations. From the this point the combinations IVPBC-535 x ACS-03-14 and IVPBC-535 x SG-5 would ideal one which may serve as a better source population for deriving superior segregants in advanced generations.

**KEY WORDS :** Chilli, Diallel, General combining ability, Specific combining ability

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