

## **GCA and SCA for yield components in okra**

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**ABSTRACT :** The present investigation was carried out to study combining ability of yield and related traits of okra in rainy seasons of 2013 and 2014 at Vegetable Research Farm, Department of Horticulture, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi. The experimental material consisted of twelve parents and 66 F<sub>1</sub> hybrids produced in a diallel mating excluding reciprocals. Analysis of variance for combining ability exhibited the significance of both GCA and SCA effects for all the characters except for days to 50% of flowering in case of gca. The parents and crosses for number of fruits per plant, total yield and seed yield have been identified and these can be commercially exploited. It can be concluded that improvement of these traits can be accomplished both through pure line breeding as well as through heterosis breeding. For fruit yield per plant and fruit yield per hectare, the genotypes IC-45802, Parbhani Kranti and VRO-3 were observed as good general combiners and the cross combinations IC-45802×SB-8, IC-45802×Pusa A-4 and IC-282272×Sel-4 were observed as good specific combiners.

**Key Words :** Okra, diallel, GCA and SCA.