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Lady's finger or okra (Abelmoschus esculentus (L) Moench), commonly known as bhindi in Hindi, belongs to the family Malvaceae. It is an important vegetable crop grown throughout the country, in plains and hills both. In the plains it is cultivated during summer and rainy seasons. It can also be grown in winter season where the frost is not a problem. In the hills, it is grown during summer season.

It's green and immature fruits are used in various delicious preparation such as fried, curries, stew and cooked into soup. It can also be preserved as dried and canned. Matured fruits and stems, containing crude fibre are used in paper industry and purifying cane juice for gur making. Singh et al. (1974) analysed okra fruits and reported 6.6 to 10.4 per cent crude fibre, 81.6 to 90.5 per cent edible portion, 14.40 to 18.60 per cent protein and 8.20 to 9.16 per cent ash of the total weight. Among minerals Ca ranged from 99 to 198, P from 34.5 to 56.0 and Fe from 0.8 to 2.4 mg per 100 g of edible portion.

Okra is a self pollinated crop, but 8.75 per cent cross pollination has also been reported by Purewal and Randhawa (1947). It's growing habit, short life span and adaptability to wide range of climate have attracted not
only the kitchen gardeners and commercial growers but breeders and geneticists also. The monadelphous condition of the stamens and large size of the flowers hasten the emasculation work, and large number of seeds per capsule help to get more crossed seeds with less labour. The short duration of the crop, adaptation to wide range of climate and no dormancy in the seeds make it possible to grow two or even three generations in one year. Despite these attributes very sporadic studies have been made on the genetic aspect of this crop.

The limited breeding achievements in this crop have been mostly due to the use of initial parent material of narrow genetic base and adaption of insufficient breeding techniques. To outline a proper breeding technique for the improvement of this crop, it is necessary to study the extent of genetic diversity and different genetic parameters to determine, the type of gene action involved and degree of genetic advance possible.

Yield is a complex character and is the product of a number of components, each of which is polygenically controlled. It is largely susceptible to environmental fluctuations consequently phenotypic selection does not necessarily result in the genetic gain and hence it becomes necessary to employ indirect method such as determination of association existing between different variables.
Selection pressure may easily be exerted on any character which show close association with yield. Therefore, determination of association among important metric traits, would enable the breeder to undertake an effective selection programme.

Success in any plant breeding programme largely depends on the selection of suitable parents. It is necessary to adopt suitable mating design to provide information on the combining ability. Analysis of the nature of gene action in plants by means of diallel crosses is of practical utility in plant breeding though it has limitations of screening of large number of genotypes simultaneously. In situations where fairly large number of genotypes are to be screened, partial diallel technique appears to be quite useful (Gilbert, 1958; Kempthorne and Curnow, 1961; Murty et al., 1967). Therefore, the present investigation was undertaken to gather genetic information on yield and its components in twenty lines of lady's finger through the use of partial diallel. These informations will be about heritability, genetic advance, genetic variability, genetic association, combining ability, heterosis and inbreeding depression.