

# A DIALLEL CROSS ANALYSIS FOR SHEDDING IN FABA BEANS

(*Vicia faba* L.)

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## INTRODUCTION

Many efforts are being made to produce varieties characterized by earliness and minimal shedding pods and flowers caused by stormy weather prevailing in February. Few studies are available in the literature on gene action of shedding in field bean which affects yield and its components.

The present study was carried out to estimate the types of genetic variance components and their interaction by environments for number of flowers per main stem, percent shedding of flowers, percent pod shedding and total percent shedding in field beans.

## MATERIALS AND METHODS

The parental varieties or lines in this study were NA 112, I.155, I.54, F.70/41/808, Moshtohor-1. Half diallel

crosses were made among these five parents during the 1982/83 and 1983/84 seasons. The five parents and their hybrids were grown in a randomized complete block design with three replications in both 1983/1984 and 1984/1985 at the Agricultural Experiment Station, Moshtohor, Egypt. The characters studied were :

1- Number of flowers on main stem

2- Percent shedding of flowers on main stem

$$= \frac{\text{no. of flowers} - \text{no. of young set pod}}{\text{no. of flowers}} \times 100$$

3- Pod shedding percent =

$$\frac{\text{no. of young set pods} - \text{no. of mature pods}}{\text{no. of young set pods}} \times 100$$

4- Total shedding percent =

$$\frac{\text{no. of flowers} - \text{no. of mature pods}}{\text{no. of flowers}} \times 100$$

The data were recorded from the main stem of ten guarded plants per plot.

The analysis of variance for combining ability and estimation of