

Heterosis for Yield and Yield Related Characters in Maize (*zea mays* L.)

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ABSTRACT

The heterosis studies were conducted using 10 parents and their 45 hybrids obtained from a half-diallel mating for eleven grain yield and yield components over two locations and two seasons. The results indicated that for most of the characters, the role of non-additive gene action is predominant. Hence, a breeder should exploit the non-additive gene action through exploitation of heterosis. Heterosis for most of the hybrids was accomplished for ear length, ear girth, number of kernel rows per ear, number of kernels per row and 100 kernel weight. Hence, improvement in these characters ensures higher yield. Since the present investigation is carried out at two locations and two seasons for 45 hybrids the best performing hybrids should be tried at multilocations and seasons before the commercial exploitation in the farmer's field.

Key words : Heterosis, Locations, Maize, Seasons, Yield.