

Heterosis Studies in Single Cross Hybrids of Maize (*Zea mays* L.) for Yield and Yield Attributing Traits under Rice Fallow System

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ABSTRACT

In the present investigation, forty five F₁ single cross hybrids developed through crossing ten inbred lines in a half diallel fashion were evaluated under *rice fallow* situation. Maximum heterosis was obtained for yield which ranged from 37.89 (CM 210 × BML 6) to 202.12 (CM 120 × CM 131) per cent. The hybrids CM 120 × CM 131, CM 131 × BML 10 and CM 120 × BML 13 showed highest heterobeltiosis for grain yield per plant and also showed higher herterobeltiosis for plant height, ear girth, number of kernels per row and 100- kernel weight coupled with high *per se* performance. Hence, these crosses could be exploited to a maximum extent in future heteosis breeding programmes to improve the yield under *rice fallow* system.

Key words : Heterosis, Rice fallow maize.