

Studies on Heterosis and Combining Ability of Bacterial Leaf Blight Donors in Rice (*Oryza sativa* L.)

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ABSTRACT

A line x tester analysis involving four bacterial leaf blight donors and three high yielding varieties was taken up to elucidate information on heterosis and combining ability of bacterial leaf blight donors for yield and yield component character during kharif 2009. The results revealed IET 8585 to be good combiner for grain yield per plant and hence, its importance in rice breeding programmes aimed at the development of high yielding and bacterial leaf blight resistant varieties. Further, the hybrid MTU 2077/IET 8585 exhibited high per se, heterosis and desirable sca effects for grain yield per plant and was identified as the most potential combination for isolation of homozygous lines generations for the development of high yielding and bacterial leaf blight resistant varieties.

Key words : Bacterial leaf blight donors, Combining ability, Heterosis, Rice, Yield, Yield components.