

Heterosis for Yield and Yield Components in CMS based Hybrids in Rice (*Oryza sativa* L.)

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ABSTRACT

Forty eight hybrids developed from crossing four CMS lines and twelve testers were evaluated for the extent of heterosis over mid parent, better parent and standard parent for yield and yield components in rice during *rabi* 2010. Seven crosses out of 48 exhibited highly significant standard heterosis for grain yield plant⁻¹. Heterosis for grain yield was manifested due to the significant and positive heterosis for its components *viz.*, total number of productive tillers per plant, number of grains per panicle, 200-kernel test weight and harvest index. The top four heterotic combinations identified for grain yield plant⁻¹ were APMS 6A x MTU 1078, IR 58025A x MTU 5249, APMS 6A x MTU 7029 and IR 58025A x MTU 1078 which exhibited more than 20% standard heterosis.

Key words : : CMS lines, Heterosis, Rice, Yield components.