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# Estimation of heterosis for tuber yield and its components in potato (*Solanum tuberosum* L.)

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**ABSTRACT** : An experiment was conducted to estimate heterosis for tuber yield and its components under early harvest crop (75 day after planting) and medium harvest crop (90 day after planting) of potato in 32 crosses using line × tester (8 × 4) matting design. The results revealed that mean squares due to parents vs. hybrids were highly significant for all the characters, plant height (cm), number of stems per plant, fresh weight of tops per plant (g), number of tubers per plant, tuber yield per plant (g), average tuber weight (g), harvest index (%), tuber dry matter (%), chip colour index (1-10 scale), reducing sugar (%) and total soluble solids (%). The hybrids viz., MS/95-117 × TPS 13 (26.92 %) and Kufri Laukar × Kufri Chipsona 1 (13.03 %) in 75 days harvest condition and hybrids viz., MS/95-117 × TPS 13 (23.24 %), MS/95-117 × Kufri Chipsona 2 (22.29 %) and Kufri Jyoti × Kufri Chipsona 1 (12.50 %) in 90 days harvest condition exhibited significant positive heterobeltiosis for tuber yield per plant. This indicated that magnitude of heterosis varied within as well as between characters.

**KEY WORDS** : Potato, *Solanum tuberosum* L., Heterosis, Line × tester analysis

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