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HETEROSIS DIALLEL CROSSES OF WATERMELON (*CITRULLUS LANATUS* THUNB)

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ABSTRACT : Eight parental lines and their 28 F_1 hybrids of watermelon obtained from half diallel design were studied to investigate the extent of heterosis for yield and its contributing traits. The fruit yield (q/ha) parents Arka Manik (589.25) Durgapura Selection (552-65) and Asahi Yamato (599.28) were observed to be the best among all patents. Appreciable heterosis was recorded over better and standard parent for all the traits studied. In order of merit, Arka Manik x Durgapura Selection, Durgapura Selection x Asahi Yamato and Arka Manik x Asahi Yamato were recorded to be three best performing F_1 hybrids for fruit yield (q/ha) and number of fruits per plant. The best performing F_1 hybrid Arka Manik x Durgapura selection recorded 31.21% higher yield over standard check (Arka Jyoti) could be exploited for commercial cultivation.

Key Words : Heterosis diallel crosses of watermelon.