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RESEARCH PAPER

Studies on heterosis for fruit yield and quality attributing characters in in okra [*Abelmoschus esculentus* (L.) Moench]

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Abstract : The present investigation was conducted on heterosis for fruit yield quality attributing characters in okra. Fifteen F_1 hybrids were generated by half diallel (excluding reciprocals) mating design. These F_1 hybrids along with six parents were evaluated in Randomized Block Design with three replications during late *Rabi* season of 2018 at three locations HRS, Lam; KVK, V.R.Gudem and KVK, Vonipenta, Andhra Pradesh. Observations were recorded for five randomly selected and tagged plants from each treatment for fruit yield and quality attributing characters *viz.,* number of fruits per plant, fruit length (cm), fruit girth (cm), fruit weight (g), number of seeds per fruit, test weight (g/100), fruit yield per plant (g), fruit yield per hectare (t), fibre content (%), ascorbic acid content (mg/100g) and shelf life (days). The values of F_1 hybrids averaged over three replications were used for estimating heterosis and pooled data was obtained. The top five heterotic cross combinations *viz.,* 440-10-1 x HRB-9-2, VRO-6 x HRB-9-2, TCR-1674 x HRB-9-2, VRO-6 x JPM-20-16-39 and VRO-3 x HRB-9-2 were identified as stable with desirable heterosis for fruit yield and other important traits.

Key Words : Okra, Heterosis, Half diallel, Yield, Quality

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