B-36 Selection of female parent in exploiting hybrid vigour in Okra [*Abelmoschus esculentus* (L) Moench] among the genotypes of diverse origin

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Okra is a high nutritive vegetable and its demand in our country commands an increase in productio Exploitation of hybrid vigour for yield has been reported in this crop.

F_1 hybrids of diallal crosses gave significant differences in performance and hence the necessity to find the appropriate female parent to be used in a hybridisation programme.

Diallal crosses were made in 3 genotypes of diverse origin [HRB_{10} (from India), Palvendi (from Vavuni district)] and Batticaloa local (from Batticaloa district) and the level of hybrid vigour was studied in p yield, number of pods per plant, pod weight and pod length.

Among the parents Palvendi was superior to Batticaloa local in aspects of yield, number of pods per pla pod weight, pod length etc. In the diallal crossed hybrids, Palvendi x Batticaloa local gave the high performance in the above aspects by exceeding the value of the mid parent by 91%, 58%, 22.73% and 2 respectively, in which the better parent Palvendi was used as the female parent. A similar trend w observed in the cross between HRB_{10} x Batticaloa local in which the better parent HRB_{10} was used as fem parent; this exceeded the values of the mid parent by 42% , 20%, 14.5% and 1% respectively, and in t cross between Palvendi x HRB_{10} it exceeded the mid parent value for yield, pod weight and pod length 4%, 10.6% and 5.5% respectively, in which Palvendi was the better parent. The reciprocal crosses show lower values in these characters.

From these facts, it appears that selection of better parent as female parent is important to achieve hyb vigour in okra.