



Per Se Performance of Parents and Hybrids of Cowpea (*Vigna unguiculata* L.)

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Abstract: Pod characters like pod length, pod weight, number of pods per cluster and number of pods per plant are very important yield component which determines the marketable green pod yield in vegetable cowpea. Ten parents involving six lines and four testers of cowpea and their respective hybrids generated through L x T fashion were evaluated for their per se performance for sixteen characters. The maximum pod yield per plant was in 2014/COPBVAR-6 among lines followed by 2014/COPBVAR-5, 2012/COPBVAR-3, whereas Gomti out yielded all the testers in terms of pod yield per plant. Genotype 2012/COPBVAR-3 had the highest pod length and mean pod weight as well among the lines. Genotype 2014/COPBVAR-4 was the earliest in flowering among the lines. Genotype 2014/COPBVAR-6 had the lowest plant height and the highest number of branches per plant among the lines. These parents can be used for hybridization program for future improvement of the respective characters in cowpea. Among the crosses, the highest marketable green pod yield per plant was in 2014/COPBVAR-6 x Pusa Komal which was followed by 2014/COPBVAR-6 x Kashi Kanchan, 2014/COPBVAR-6 x Gomti, 2014/COPBVAR-5 x Pusa Komal and 2014/COPBVAR-5 x Gomti. Number of pods per plant and 100-seed weight were also higher in these crosses and the average maximum number of pods per plant was when line 2014/COPBVAR-6 was used as female parent. Among other attributes the cross 2014/COPBVAR-5 x Pusa Komal recorded the maximum pod length whereas 2012/COPBVAR-2 x Gomti recorded the maximum pod width. The maximum mean pod weight was in 2012/COPBVAR-3 x Kashi Kanchan and the earliest flowering was in 2012/COPBVAR-3 x Kashi Kanchan. The lowest plant height was in 2012/COPBVAR-5 x Arka Garima and the highest number of branches per plant was in 2012/COPBVAR-3 x Kashi Kanchan indicating the scope for selection of suitable initial breeding material for further improvement as per the requirement such as high yielding, early and bushy type varieties/hybrids.

Key Words: Cowpea, Hybrids, *Per se* performance, *Vigna unguiculata*
