

Character association and path coefficient analysis of yield and yield contributing traits for higher yield and better marketable traits in bitter gourd (*Momordica charantia* L.)

Saurabh Kaser¹, V.B. Singh² and S. Saravanan¹

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ABSTRACT : Thirty genotypes of bitter gourd were used to study the association between yield, yield attributes and quality characters during summer 2012-13. The phenotypic correlation coefficients between different characters were generally similar in magnitude and nature to the corresponding genotypic correlation coefficient. The significant and positive correlation with yield per plant was observed at phenotypic level with number of fruit per plant, vine length and fruit length and fruit weight. Path coefficient analysis revealed appreciable amount of direct positive effect of number of fruit per plant, average fruit weight (g), followed by days to anthesis of first staminate flower on fruit yield per plant. The above findings suggested the possibilities of improving marketable fruit yield per plant by simultaneous improvement of these characters.

Key Words: Bitter Gourd, *Momordica charantia*, character association, direct and indirect effects.