Correlation and Path Analyses over Environments in Blackgram [Vigna mungo (L.) Hepper]

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ABSTRACT

Correlation and path coefficient analysis were carried out using 12 genotypes of blackgram in six environments. Days to 50% flowering, days to maturity, plant height, number of primary branches per plant, number of pods per plant, pod length, number of seeds per pod, 1000 seed weight, yield kg/plot and protein content were positively correlated with seed yield per plant over environments. The positive correlation of plant height, pod length, 1000 seed weight and yield kg/plot with seed yield per plant and among themselves for these characters was observed suggesting that these are the major yield contributing traits in blackgram. Path coefficient analysis also showed direct positive contribution of yield kg/plot, number of primary branches per plant, 1000 seed weight and number of seeds per pod on seed yield. These traits deserve special emphasis in selection while selecting for improvement in seed yield of blackgram.

Key words: : Blackgram, Correlation, Path Analysis.