Correlation and Path Coefficient Studies in Blackgram

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ABSTRACT

The present investigation was undertaken with 40 blackgram germplasm to study the character associations and path effects for yield, yield components and quality characters. The results on character associations revealed positive and significant association of seed yield per plant with plant height, number of clusters per plant, number of pods per plant and hundred seed weight indicating the scope for improvement of yield through selection of these traits. In contrast, negative and significant correlation of seed yield per plant was noticed with the yield component traits, pod length, number of seeds per pod and seed protein content, both at phenotypic and genotypic levels, indicating the need for balanced selection, for simultaneous improvement of these traits. Further, number of clusters per plant, number of pods per plant and pod length had high and positive direct effects on seed yield per plant, indicating the importance of these traits in effective selection criteria for improvement of seed yield per plant and development of high yielding blackgram genotypes.

Keywords: *Blackgram, Correlations, path effects, and seed yield per plant.*