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RESEARCH ARTICLE

Studies on genetic variability and morphological characterization in blackgram [*Vigna mungo* (L.) Hepper)

■ Devaraboina Shruthi and Gaibriyal M. Lal

SUMMARY

21 blackgram genotypes were grown at the field experimental centre to study the amount of genetic variability, heritability, direct and indirect effects of yield contributing components and morphological characterization in blackgram genotypes. In the present study an attempt was made to characterize and identify 21 blackgram genotypes based on 13 quantitative traits and on morphological characters like anthocyanin colour on hypocotyl, plant growth habit, time of flowering, stem colour, stem pubescence, leaf terminal shape, foliage colour, leaf vein colour, leaf pubescence, twinning habit, petiole colour, pod pubescence, peduncle length, pod length, colour of mature pod, seed colour and seed shape. Correlation co-efficient analysis revealed that seed yield per plant exhibited positive and significant association with plant height, number of primary branches, number of clusters, number of pods per plant, pod length, harvest index, biological yield. Path analysis revealed that 50% pod setting, number of pods per plant, number of seeds per pod, biological yield and harvest index showed positive direct effect on seed yield at both genotypic and phenotypic level.

Key Words : Blackgram, Morphological characters, Genetic varaibility, Correlation, Path analysis

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