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Genetic Variability Studies for Yield and its Attributing Traits in Blackgram (Vigna mungo L. Hepper)

Juhie Koknal Marak

Department of Genetic and Plant Breeding and Crop Physiology Visva Bharati University Santiniketan West Bengal India

Abstract—A study was conducted involving 41 genotypes of blackgram for genetic variability of seed yield and its attributing traits. The estimates of PCV values were higher than GCV. High estimates of GCV were observed for plant height, number of branches per plant, number of clusters per plant, number of pods per plant, 100 seed weight, protein content and seed yield per plant. Moderate GCV estimate was observed for number of pods per cluster. High heritability (>50%) was recorded for days to 1st flowering, days to 50% flowering, days to maturity, plant height, pod length, number of clusters per plant, number of pods per plant, 100 seed weight, protein content and seed yield per plant. High genetic advance as per cent of mean was observed for plant height, number of branches per plant, number of clusters per plant, number of pods per plant, 100 seed weight, protein content and seed yield per plant. High heritability coupled with high genetic advance as per cent of mean was observed for plant height, number of pods per plant and seed yield per plant. These information showed that there is sufficient genetic variability to justify selection for improvement in the blackgram genotypes studied and will be of immense practical use for plant breeders to choose parents of interest to meet different breeding objectives.