RAPD ANALYSIS IN MUNGBEAN [VIGNA RADIATA (L.) WILCZEK]

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Abstract: Molecular characterization is helpful in understanding the phylogenetic relationship among various germplasm to reveal the genetic diversity within a given taxonomic group. Evaluation of genetic diversity would promote the efficient use of genetic variations (Paterson et al., 1991), effective conservation and purity of the genotype to be determined as well as utilization of germplasm in crop improvement. RAPD marker analysis was performed to detect relatedness and diversity among eight parental genotypes. Twenty five RAPD primers having 60% or more GC content were used for the present investigation. Out of 25 primers only 17 were amplified and produce total 391 amplified fragments (amplicon) ranged between 100 bp to 2500 bp. Out of 104 scorable bands, 91 were polymorphic that showed 88 per cent polymorphism. The average number of bands per primer was found to be 6.12 and average numbers of polymorphic bands per primer were 5.35. OPP-10 proved to be best primer in our investigation with total 52 fragments and eight highest scorable bands as well as 100 per cent polymorphism.

Keywords: Mungbean, RAPD Markers, Yield, Yield components

REFERENCES


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