Variability Studies in Sesame (Sesamum indicum L.)

G Pavani, S V S Gangadhara Rao, V Saida Naik and G Ramesh

Department of Genetics and Plant Breeding, Agricultural College, Naira 532 185, Andhra

Pradesh

ABSTRACT

Fifty sesame germplasm lines were evaluated for genetic variability, heritability and genetic advance as per cent of mean based on 10 characters. In general the genotypic coefficient of variation observed was less than phenotypic coefficient of variation for all 10 quantitative characters, revealing the masking effect of environment. High heritability coupled with high genetic advance as per cent of mean was observed for days to 50% flowering, plant height (cm), number of branches plant⁻¹, number of seeds capsule⁻¹ and seed yield plant⁻¹ (g) indicating the role of additive gene action in governing the inheritance of these traits which can be improved by simple selection. However, high heritability coupled with low genetic advance was observed for capsule length (cm).

Key words : Sesame, Heritability, Variability parameters.