

Genetic Divergence and Variability Studies for Yield and Yield Component Traits in Safflower

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ABSTRACT

An experiment was conducted with 60 genotypes of safflower to assess variability, heritability, genetic advance, direct and indirect effects of different characters on seed yield and genetic diversity. Wide variability was observed for seed yield and other yield attributes. High phenotypic and genotypic coefficients of variation were found for number of seeds per capitulum followed by seed yield. The high heritability with high genetic advance as per cent of mean for seed yield, plant height and test weight revealed that these characters were controlled by additive gene action. The genotypes were grouped into nine clusters and seed yield contributed maximum towards genetic divergence followed by plant height and number of seeds per capitulum. The intra cluster distance ranged from 124.26 (cluster V) to 21.05 (cluster III). The maximum inter cluster distance was observed between clusters VII and IX followed by clusters IV and IX and clusters VII and VIII.

Key words : Genetic divergence, Safflower, Variability.