

TO STUDY THE GENETIC VARIABILITY IN *C. CORONARIUM* AND ITS DIFFERENT MUTANTS

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ABSTRACT

Genetic variability, heritability and expected genetic advance studied for quantitative characters for species *C. coronarium* and its different mutants. The results of the experiment revealed that number of disc florets followed by number of ray florets, ray floret weight, disc floret weight, flower head height and ray floret length recorded high phenotypic and genotypic coefficient of variation whereas, narrow phenotypic and genotypic coefficient of variation were recorded for plant spread (E-W) followed by leaf area, plant spread (N-S), leaf length, flower head diameter and leaf width that indicating less environmental interference on the expression of the traits. High heritability with magnitude of high genetic advance were recorded for number of disc florets and number of ray florets indicating preponderance of additive gene action and greater scope for improvement of these traits through selection however, ray floret width and disc floret weight showed higher heritability and low genetic advance and this could be due to non-additive gene action (dominant/epistemic) and/or less genetic variability for these traits.

KEYWORDS: Genetic Advance, Heritability, Variability, *C. Coronarium* and Mutants