

## Genetic Variations in Mutants of *Catharanthus roseus* (L) G. Don. (Sadabahar)

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*ABSTRACT* : The name 'Sadabahar' itself reflects its quality, which will bring the forever smile in the face of cancer patients. Therefore, periwinkle alkaloids are required to develop high yielding varieties by conventional breeding. Morphometric comparisons of agronomic traits under consideration were made for identification of promising mutant for commercial cultivation. The vt mutant have higher plant height, number of leaves, leaf fresh weight and total weight of plant. The upel mutant have higher leaf/stem ratio, harvest index and percentage crude alkaloid. The nt mutants have higher leaf area, percentage of catharanthine and vindoline whereas dwob mutant has higher percentage of vincristine and vinblastine. Higher heritability and genetic advance were recorded for plant height, number of leaves and total weight of plant. The crude alkaloid was negatively correlated with plant height, harvest index but plant height is positively correlated with leaf area and harvest index.

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*Key words* : **Catharanthus roseus**, *heritability, genetic advance, Genotypic and phenotypic correlation.*

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