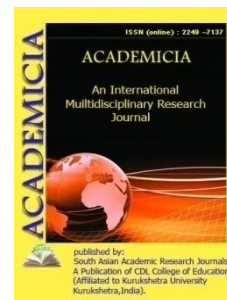




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## AN OVERVIEW ON SOMA CLONAL VARIATION

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### ABSTRACT

*Plant breeders may use somaclonal variation as a technique. The study looks at the best places to use this technology and the variables that restrict or enhance its chances of success. (1) the degree of deviation from ordered development, (2) the genotype, (3) growth regulators, and (4) the tissue supply are the major variables that affect the variety produced by tissue culture. Despite growing knowledge of how these variables interact, it remains impossible to anticipate the result of a somaclonal breeding effort. Somaclonal variation has resulted in the creation of new varieties, but in many cases, better variants were not chosen because (1) the variance was all negative, (2) significant improvements were also greatly changed in negative ways, (3) the modifications were not novel, or (4) the modifications were not steady after selfing or crossing. Somaclonal variation is less expensive than other genetic modification techniques. It is also more generally applicable at the moment and does not require confinement measures. It's worked best in crops with restricted genetic systems or genetic bases, where it may offer a quick source of variety for crop development.*

**KEYWORDS:** Genetic, Soma clonal variation, Tissue culture.

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