

## **GENETIC DIFFERENTIATION OF CENTRAL AND NORTHERN POPULATIONS OF INDIAN *SANTALUM ALBUM* CHARACTERIZED BY RAPD MARKERS**

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**ABSTRACT:** Random amplified polymorphic DNA (RAPD) markers were used to estimate the genetic variation in three naturally occurring populations of *Santalum album*. Low level of genetic diversity was observed within and between the populations indicated that they have been established for long period with high gene flow. The different pattern of diversity suggests that the ecotypes in three different regions have been subjected to differences in the relative influences of genetic drift and gene flow during their evolutionary history. Based on the results presented in this study, distribution of the genetic variation within species is fundamental for conservation of genetic resources and breeding purpose. DNA markers made possible a fast survey of a species genetic diversity and population genetic structure.

**Key words :** *Conservation, Genetic diversity, Gene flow, RAPD, Santalum album.*