Kerala genetic variation in populations of *Monochoria vaginalis* in different geographical area of coastal

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*Monochoria vaginalis* is a native aquatic medicinal plant of Kerala. In this study, populations of *Monochoria vaginalis* from different geographical locations were compared by using RAPD marker. The RAPDs provide a useful tool for assessing genetic diversity of rare, endemic species and for resolving relationships among populations. For the above study, ten plants were collected from five different geographical locations. Fourteen decamer oligonucleotide primers were used to amplify the genomic DNA isolated from fresh leaves of the collected plants. Ten primers initially screened displayed RAPD profiles with polymorphic bands and many of these bands varied in molecular weight and intensity. The number of polymorphic bands scored per primer ranged from 2 to 8. Dendrograms were constructed using UPGMA algorithm based on the similarity index values. The present study shows that RAPD analysis is useful for genetic diversity analysis. Genetic characterization not only provides database for genetic biodiversity but also is a necessity for the protection of native species.

**Biography**

Smitha Thomas. K., a research scholar doing research under the guidance of Dr. Linu Mathew in school of biosciences, Mahatma Gandhi University, Kottayam, India. My area of research is plant molecular biology.