

CO TO ISLAND, QUANG NINH PROVINCE BY USING RAPD MOLECULAR MARKER

**Tran Van Tam, Dang Van Dong, Dang Van Lam,
Tran Duy Duong, Tran Dang Khanh**

Summary

The use of molecular markers to evaluate the genetic diversity between samples of Tung La Han (*Podocarpus macrophyllus*) in CoTo Island, Quang Ninh province will contribute to the collection and distribution the plant. Genotyping, evaluation and conservation of genetic resources as well as providing information on genetic relationships between Tung La Han varieties as a basis for breeding programs. PCR-RAPD reactions of 32 random primers belonging to OPA, OPB, OPC, OPD, and OPN groups used to study genetic diversity in 12 samples and each primer have polymorphism. With 384 PCR-RAPD reactions, it has multiplied a total of 1692 bands of 504 different sized. The average of each primer was 52.87 bands and each sample was 4.82 bands. Base on the phylogenetic trees, 12 samples of Tung La Han were divided in two main groups and have genetic similarity coefficient ranging from 62 - 99.9% and the number 3 and number 4 samples have the highest homology which have 99.9% of coefficient.

Keywords: *Podocarpus macrophyllus, genetic marker, primer.*