

GENETIC DIVERSITY OF THE SPECIES IN FAMILY MENISPERMACEAE CONTAINING BERBERIN BY RAPDMARKERS

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Summary

RAPD markers were used for analyzing genetic diversity among 36 accessions of family Menispermaceae containing berberine collected in provinces in Vietnam. Using 22 random amplified polymorphic DNA markers for genomic DNA amplification obtained a total of 3216 DNA bands, having 202 differences DNA banding patterns, in which there are 167 polymorphic bands (82.7%) and 35 monomorphic bands (17.3%). Genetic similarity coefficients of 36 accessions of family Menispermaceae ranged from 0.53 to 0.92. At 73 percent genetic similarity level, 36 accessions were divided into nine groups. Group 1 including 8 accessions of species *Arcangelisia flava* (L.) Merr; group 2 and 3 including accessions of genus *Cyclea*; group 4, 5, 6, 7 and 8 including accessions of genus *Tinospora*; Group 9 including 5 accessions of species *Fibraurea recisa* Pierre. The obtained results could be useful for germplasm conservation and breeding of species in family Menispermaceae containing berberin in Vietnam.

Key words: *Berberin, genetic diversity, menispermaceae, RAPD.*