

GENETIC DIVERSITY AMONG ACCESSIONS OF SOLANUM-HAINANENSE HANCE COLLECTED IN VIETNAM USING SSR MARKERS

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Summary

Solanum hainanense Hance is one of the precious and valuable medicinal plant species used to treat many diseases such as hepatitis, liver detoxification, antioxidants, anticancer, etc. It is distributed in China, Campuchia, Thailand and Vietnam. A total of 17 accessions collected in 10 provinces in Vietnam were evaluated genetic diversity using SSR markers. The twenty-one of SSR markers have been selected for PCR reactions. The results showed that 4 of SSR markers creating only monomorphic bands ranging 0.03-0.27 kb and 5 of SSR markers (EEMS21, EEMS24, CSM30, EEMS29, EMS23) producing 39 bands, ranging 0.09-1.6 kb, in which having 34 polymorphic and 5 monomorphic bands. PICs ranging from 0.604 to 0.972. Coefficients of genetic similarity among of accessions ranged 0.120 - 0.897. Accessions were divided into three major groups: Group I, including CGL1.1, CGL1.2, CGL2.1, CGL2.2, CGL3, CGL4; group II, including CGL5, CGL14; group III, including CGL6, CGL7, CGL8, CGL9.1, CGL9.2, CGL10, CGL11, CGL12, CGL13. The present research gave the useful genetic information for conservation and breeding of *Solanum hainanense* Hance in Vietnam.

Key words: Genetic diversity, *solanum hainamense*, SSR monker.