ABSTRACT

Biotransformation of Propylparaben (Nipasol) by Cell Suspension Cultures of $Solanum\ mammosum\ L.$

Eka Saputra Fauzi

Biotransformation using plant tissue culture can change the structure of a compounds into its glycoside. The objective of this research was to study the ability of cell suspension of *Solanum mammosum* L. to transform propylparaben. Based on toxicity test, the highest propylparaben concentration tolerated by cell suspension culture of *Solanum mammosum* was 100 ppm. The result of TLC and TLC-Scanner showed that there was no biotransformation occured in the cell, because the compounds has a similar Rf value compared to Rf of propylparaben's standard and control extract. The TLC-Densitometer analysis also showed that the product has similarly UV spectrum with propylparaben UV spectrum.

Keyword: Propylparaben, Suspension Culture, Solamum mammosum L.,
Biotransformation.

viii

Skripsi Biotransformasi.... Eka Saputra Fauzi