

ABSTRACT

Biotransformation of Nipagin by Cell Suspension Cultures of *Solanum mammosum* L.

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Biotransformation using plant tissue culture can change the structure of a compounds into it's glycoside. The objective of this research was to study the ability of cell suspension of *Solanum mammosum* L. to transform nipagin. Based on toxicity test, the highest concentration tolerated by cell suspension culture of *Solanum mammosum* was 250 ppm. Thin Layer Chromatography (TLC) analysis of medium and biomasses showed that biotransformation products was accumulated in the biomasses. The result of TLC and TLC-Scanner showed that biotransformation product has lower R_f value than nipagin standard and profile spectrum that was similar to nipagin.

Keywords : nipagin, Suspension Culture, *Solanum mammosum* L. Biotransformation.

