

**CYTOTOXIC EFFECT SOME PHENOLIC COMPOUNDS FROM  
FERMENTED BLACK SOYBEANS (*GLICINE SOJA*) EXTRACT  
AGAINST AS BREAST CANCER CELL LINE T47D  
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*Abstract*— The aim of this research is to examine the cytotoxic effect against as breast cancer cell line T47D and to isolate phenolic compounds from some methanol extracts from fermented black soybeans (*Glycine soja*) on various times (0; 2; 4; 6; and 8 days). The isolation of these compound from methanol extract of fermented black soybean was carried out by chromatographic method, whereas structure elucidation was performed by interpretation of spectroscopic data, including UV, IR, <sup>1</sup>H and <sup>13</sup>C NMR. From these results, we found that fermented on 8 days black soybean extract showed the highest cytotoxic activity against breast cancer cell line T47D. From methanol extract of these fermented black soybean, we isolated three known compound namely p-hydroxybenzoat (1), genestein (2), and genestein glycoside (3).

*Keywords*—**black soybean; breast cancer T47D**