

**ISOLASI DAN KARAKTERISASI SENYAWA TRITERPENOID DARI
FRAKSI ETIL ASETAT KULIT BATANG SURIAN (*Toona sinensis*)
DAN UJI AKTIVITAS ANTIBAKTERI**

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ABSTRACT

ISOLATION AND CHARACTERIZATION OF STRUCTURE TRITERPENOID COMPOUND FROM ETHYL ACETATE FRACTION SURIAN STEM BARK (*Toona sinensis*) AND ANTIBACTERIAL ACTIVITY

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Isolation and purification of triterpenoid compounds from ethyl acetate fraction Surian stem bark (*Toona sinensis*) was done. Isolation was done by using the column chromatography method with a stationary phase of silica gel and eluted by the isocratic method. The results of the separation of column chromatography in A fraction, positively contained triterpenoids and giving single simple spot on thin layer chromatography plate so purification was done with recrystallization. The isolated compound was white solids melted at the temperatures of 122°C-123°C, it yields triterpenoid compound to testify with *Liebermann-Burchard* (LB) on the thin layer chromatography plate giving single stain violet spot. The compound pure was characterized using spectroscopy method. The UV spectrum isolated compound showed the existence of maximum uptake of double bond at $\lambda_{\max} = 202 \text{ nm}$. The IR spectrum showed the existence of characteristics of triterpenoid compounds was geminal dimethyl functional groups uptake at $1465,55 \text{ cm}^{-1}$ and $1372,74 \text{ cm}^{-1}$, O-H at ($3100\text{-}3400 \text{ cm}^{-1}$) and C=C at $1617,86 \text{ cm}^{-1}$. Antibacterial activity test results showed that the isolated compound had a weak inhibitory level with a clear zone of 3.1 mm for *S. aureus* and 2 mm for *E. coli* at a concentration of 1000 mg / L.

Keywords : *Toona sinensis*, triterpenoid, anti-bakteria

