

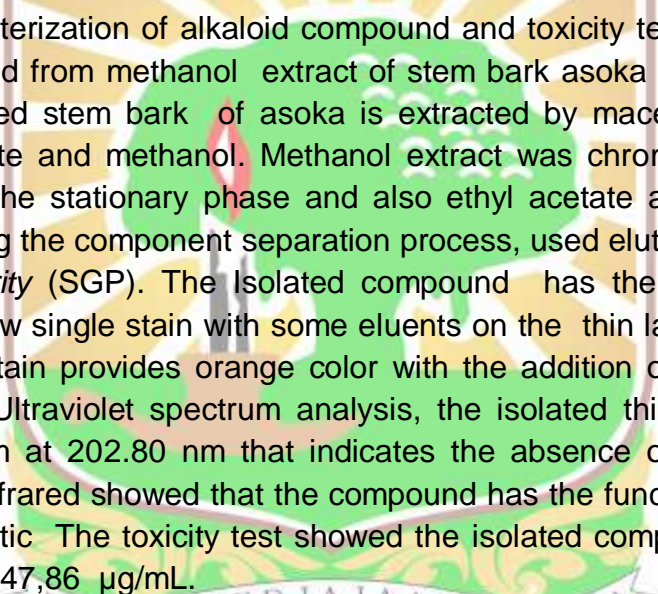
## ABSTRACT

### ISOLATION AND CHARACTERIZATION OF ALKALOID COMPOUND FROM METHANOL EXTRACT OF STEM BARK ASOKA (*Polyalthia longifolia*) AND TOXICITY TEST WITH *Brine Shrimps Lethality Test* METHOD

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Isolation and characterization of alkaloid compound and toxicity test with *Brine Shrimp Lethality Test* method from methanol extract of stem bark asoka (*Polyalthia longifolia*) have done. The dried stem bark of asoka is extracted by macerated method using hexane, ethyl acetate and methanol. Methanol extract was chromatographed column using silica gel as the stationary phase and also ethyl acetate and methanol as the mobile phase. During the component separation process, used elution system based on *Step-Gradient Polarity* (SGP). The Isolated compound has the shape of white wis yellow solid and show single stain with some eluents on the thin layer chromatography (TLC). The single stain provides orange color with the addition of specific reagent of Dragendroff. From Ultraviolet spectrum analysis, the isolated this compound has an absorption maximum at 202.80 nm that indicates the absence of conjugated double bonds. Spectrum infrared showed that the compound has the functional groups C=O, N-H and C-H aromatic. The toxicity test showed the isolated compound of quite high for toxicity with LC<sub>50</sub> 47,86 µg/mL.

Keywords: *Polyalthia longifolia*, alkaloid, *Brine Shrimp Lethality Test*