

## ABSTRACT

### **Formulation of Transparent Solid Soap Red Betel Leaf Extract (*Piper crocatum* Ruiz & Pav) with Variation Concentration of Stearic Acid and Cocamidopropyl Betaine**

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Red betel leaf (*Piper crocatum* Ruiz & Pav) has the ability against antibacterial activity such as *S.aureus* and *E.coli* because it contains flavonoid compounds which have antibacterial activity. This study aims to obtain transparent solid soap preparations from red betel leaf extract which has antibacterial activity. Red betel leaf (*Piper crocatum* Ruiz & Pav) leaf extract was obtained through a maceration process using 70% ethanol solvent. Extracts with a concentration of 0.05 g were then formulated on transparent solid soap preparations in 4 soap formulas using stearic acid, VCO, 20% NaOH, ethanol, glierin, sucrose, SLS and cocamidopropyl betaine. In this study, stearic and betaine acid concentrations were varied to get transparent solid soap results that having a stable foam and high hardness so that it is resistant in the process of stability, so the characteristics of the transparency test, pH test, water content test, foam test, organoleptic, soap hardness test and stability test. The results showed that the transparent betel leaf extract transparent transparent soap produced with 13% stearic acid concentration and 4% betaine or F3 had good criteria with a good level of transparency, good foam stability and optimal soap hardness with a hardness of soap 10.07 kg, and foam power 1.9 cm.

**Keywords: Red betel leaf, Transparent Solid Soap, Stearic Acid, Cocamidopropyl Betaine.**