INFLUENCE OF RED BETEL LEAF'S EXTRACT (*Piper crocatum*) TO THE HISTOPATOLOGY IMAGE ON RAT'S SKIN WHICH INFECTED BY *Staphylococcus aureus*

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ABSTRACT

The aim of this research is to know the effect of red betel leaf's extract (*Piper crocatum*) to the histopatology image in wistar rat's skin which infected by *Staphylococcus aureus*. The experimental laboratoric research use Randomized Post Test. It was designed for 20 wistar male rats, in 3 month ages and divided into 5 group, P0 was negative control group wound without medical treatment, P1 was positive control group wound with Povidone iodine, P2 was group wound with red betel leaf's extract 50%, P3 was group wound with red betel leaf's extract 25% and P4 was group wound with red betel leaf's extract 12,5%. Hypothesis test such as total of neutrophil, macrophage, fibroblast, and angiogenesis were analyzed by ANOVA and LSD. Whereas collagen density was analyzed by Kruskall-Wallis test and Mann-Whitney test. The result of this research was P4 group (group wound with red betel leaf's extract 12,5%) can improve the histopotology image in rat's skin which infected by *Staphylococcus aureus*.

Key word : Wound healing, red betel leaf extract, neutrophil, macrophage, fibroblast, angiogenesis and collagen density.