

**THE EFFECT OF KATUK (*Sauropus androgynus*) LEAF EXTRACT GEL ON ANGIOGENESIS OF WHITE RAT (*Rattus norvegicus*) DEEP PARTIAL THICKNESS SKIN BURNS HEALING**

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**ABSTRACT**

This research was conducted to determine the effect of Katuk (*Sauropus androgynus*) leaf extract gel on angiogenesis of white rat (*Rattus norvegicus*) deep partial thickness skin burns healing. Fifty male Wistar rats were divided into five groups. T0 as negative control group is normal skin, T1 as positive control is skin burns treated with gel base (placebo), T2 is skin burns treated with 2,5% Katuk leaf extract gel, T3 is skin burns treated with 5% Katuk leaf extract gel and T4 is skin burns treated with 10% Katuk leaf extract gel. The gel was given twice per day started at the time after burn wound making. The skin samples from 25 rats were collected after 7 days of treatment and 25 rats skin samples were collected after 14 days of treatment. The histopathological examination for angiogenesis was performed by counting the number of capillaries formed. The results were analyzed with Two Way ANOVA with interaction and continued with Tukey test. The results showed Katuk leaf extract gel has increased the angiogenesis of white rat deep partial thickness skin burns healing and T4 which treated with 10% Katuk leaf extract gel in 14 days showed the highest number of capillaries. Katuk leaf extract gel increased the angiogenesis through its antibacterial, anti-inflammatory and antioxidant effects during the healing process of the burns. The conclusion of this study was 10% Katuk leaf extract gel can significantly increase the angiogenesis of white rat deep partial thickness skin burns healing.

**Key words:** *Sauropus androgynus*, burns, angiogenesis.