

**THE EFFECT OF OKRA (*Abelmoschus esculentus*) EXTRACT  
OINTMENT TO MACROSCOPIC BURN LESION, TOTAL VALUE AND  
DIFFERENTIAL COUNTING OF WHITE RATS LEUCOCYTE WHICH  
INJURED WITH BURNS**

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**ABSTRACT**

This study aims to prove the effect of okra extract ointment to macroscopic burn lesion, total value and differential counting of leukocyte in the early phases of healing of burns. This study is using 30 white rats as experimental animals. Rats were randomly divided into 10 groups based on treatment and time. The treatment consists of untreated burns, burnazin treatment, and treatment using 3%, 6% and 12% concentration of okra extract. Observation are scheduled on the 3<sup>rd</sup> day and 10<sup>th</sup> day. White rats were injured with deep partial thickness burn in the dorsal region of the rat body, and then treated until day 3 and day 10. Macroscopic observations on the burns lesion are done during the treatment. After the treatment is completed, samples were taken in the form of intracardiac blood which deposited into EDTA tubes. Then the blood samples were taken to the laboratory for examination and calculation of the total value and differential counting of leukocytes. This study was analyzed using ANOVA, Duncan and Kruskal Wallis. The study shows shift to the right of leukocyte is occurred in the leucocyte differential count of each group. It also shows no significant results of the total value and differential counting of leukocyte either on day 3 and day 10 ( $p > 0.05$ ), but there is a decrease in total value of leukocytes, eosinophils and monocytes from day 3 to day 10 in the group treated with 3%, 6% and 12% of okra extract ointment. The group of 12% okra extract ointments on day 3 shows a significant % increase in neutrophils . From the macroscopic burns observation, 12% concentration okra extract ointment shows the best result .

**Keywords** : okra (*Abelmoschus esculentus*), burns, total leucocyte, differential counting of leucocyte, macroscopic burn lesion