

## **ABSTRACT**

### **THE COMPARISON OF SECOND DEGREE BURNS HEALING RATE BETWEEN THE APPLICATION OF TOPICAL HONEY AND BINAHONG LEAVES IN SPRAGUE DAWLEY RATS**

**By**

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Burns is a very serious health problem and frequently encountered by the doctor. Various studies have shown that honey is effective in healing burns. However there is a traditional medicine that binahong leaves can treat burns and gives a good healing effect too. This research aims to know the 2<sup>nd</sup> degree burns healing rate between the application of topical honey and binahong in Sprague Dawley rats.

This experimental research using the post test only controlled group design of 6 white rats which were given each of 3 treatments. The treatment consists of a control group, a group that was given topical honey and a group that was given binahong leaves. Rats performed clinical measurements and skin samples taken for microscopic examination after 14 days of treatment.

The results showed on the microscopic observations which is the values are not statistically significant between the application of the topical honey and binahong leaves. The macroscopic examination showed p value  $<0.05$  (0.000) that means binahong leaves can reduce the diameter of the burns significantly compared to the topical honey.

In conclusion, the comparasion of second degree burns healing rate by topical of honey is better than binahong leaves on microscopic observation but it's not statistically significant on macroscopic feature.

**Key words:** Binahong, Histopathology of skin, Honey, Second degree burn