ABSTRACT

Objective: To differentiate the effect between *Trigona* honey and *Apis dorsata* honey against bacteria colonization in second degree burn on *Rattus novergicus* strain Wistar.

Design: Design of this study was experimental. This study used 27 rats randomly divided into 3 groups. All 3 group received deep second degree burns (2x2cm). The second degree burn is then left for 1 hour before we give it any treatment. The experimental group was divided into 2, in which 1 group receive 1cc *Trigona* honey while the other receive 1cc *Apis dorsata* honey. The control group was treated with SSD. Observation and data collection was done at fifth day. Bacteria colonization is obtained using quadrant streak method in blood agar. The blood agar is then incubated for 1 day before being counted.

Settings: Biochemistry Department Medical Faculty of Airlangga University and Microbiology Department Medical Faculty of Airlangga University.

Results: Statistically, there’s no difference in the amount of bacteria colonization between *Trigona* honey and *Apis dorsata* honey. There’s also no difference between *Trigona* honey, *Apis dorsata* honey and SSD in the amount of bacteria colonization.

Conclusion: There’s no difference between *Trigona* honey and *Apis dorsata* honey performance in maintaining the amount of bacteria colonization. They both also perform equal to SDD.

Keywords: burn, honey, *Trigona*, *Apis dorsata*, bacteria colonization, SSD