THE EFFECT OF KITOLOD (*Isotoma longiflora (L) Presl.*) LEAVES' EXTRACT TO HISTOPATHOLOGY OF INCISION WOUND HEALING IN MICE (*Mus musculus*)

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ABSTRACT

This research's aim is to find out the effect of Kitolod leaves' extract in incision wound healing. This research consists of making incision wound on the mice's back and cured by many treatments, K+ cured by Povidone Iodine 10% ointment, extract ointments which consist of 5%, 10%, and 20% concentration for 6 days. The wound tissues were taken to observe the sum of fibroblast and fibrocyte cells, and the collagen density. Histopathological exam was done and data analysis for the sum of fibroblast and fibrocyte cells used ANNOVA followed with Duncan test, while scoring of collagen density used *Kruskal-Wallis Test* followed with *Mann Whitney Test*. Analysis of the sum of fibroblast and fibrocyte cells showed K+ has mean and standard deviation 406,4 ± 78,96, K- 277,4 ± 69,16, P1 252,0 ± 8,66, P2 356,6 ± 49,76, and P3 269,6 ± 65,91. Analysis of the collagen density showed K+ has mean and standard deviation 24,0 ± 2,44, K- 15,2 ± 5,89, P1 18,4 ± 2,60, P2 23,8 ± 1,92, and P3 18,2 ± 2,94. The results showed there was significant difference between K+ to all treatments except P2 ($p < 0,05$) both the sum of fibroblast and fibrocyte cells, and the collagen density, but insignificance different between K+ and P2 . The increase of the fibroblast and fibrocyte cells, and the collagen density can strengthen the wound. The conclusion of these research was 10% of Kitolod leaves' extract ointment can accelerate wound healing process by increasing the number of fibroblast and fibrocyte cells, and the collagen density.

Key words : Kitolod leaves' extract, Fibroblast cell, Fibrocyte cell, Collagens, Mice.