

# EMPIRICAL TESTING OF THE ACTIVITY OF A GEL PREPARATION COMBINATION OF PEGAGAN LEAF EXTRACTS, BINAHONG LEAVES TO TREAT THE WOUNDS OF DIABETES MELLITUS PATIENTS

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## ABSTRACT

This research aims to develop external wound medicine products for diabetes. This research used raw materials from binahong leaves and gotu kola leaves which were extracted and packaged in three different dosage formulas. The results of the extraction of binahong leaves and gotu kola are in gel form. The extracts used are in the following ratio: Formula 1: Gotu kola extract 1% + Binahong extract 10%; Formula 2: Gotu kola extract 3% + Binahong extract 10%; Formula 3: Gotu kola extract 5% + Binahong extract 10%. After treatment was given to the experimental animals, an effective formula was obtained for wound healing. Based on the number of fibroblast cells, wound diameter and healing percentage, the treatment group given the combination gel was much faster compared to the negative group (Diabetes + basic gel administration). The combination gel of gotu kola and binahong showed the highest percentage of wound healing in treatment 2 (gotu kola extract 3% + binahong extract 10%) which was able to accelerate the healing process of diabetes mellitus wounds.

Kata Kunci: *binahong, gotu kola, external wounds*