INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume V, Issue IV
May 2024
Available online at https://www.instabrightgazette.com

****

GOTU KOLA (CENTELLA ASIATICA) AS WOUND AND BURN HEALING PATCH

Mikaella M. Magno
Bernice Reign H. Magnaye
Hazel J. Munez
Kisses G. Pineda
Jonelle Marie B. Rendon
Vianjen Marie B. Rendon
Balayan Senior High School

ABSTRACT

Wounds and burns present significant challenges to the body's natural healing processes, often causing pain, discomfort, and potential complications if not managed properly. Band-aids and medical patches are versatile adhesive strips designed to safeguard minor wounds such as scrapes, blisters, and cuts. To cure these damages, there are several herbs that have the potential to improve the healing properties of the mentioned band aids such as, Gotu Kola, scientifically known as Centella asiatica, a perennial herb native to Asia and commonly found in tropical regions worldwide. Renowned for its medicinal properties, Gotu Kola has been used for centuries in traditional medicine to treat various ailments, including wounds, skin conditions, and cognitive disorders. Thus, the researchers conducted this study to be able to address the challenge of wound and burn healing, seeking to find effective and natural solutions to accelerate the healing process. In this study, three experimental groups with varying amounts of the extracted oil from

****

****

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume V, Issue IV
May 2024
Available online at https://www.instabrightgazette.com

the plant was infused to the patch produced, specifically, 0.05mL was administered to Patch A, 0.10mL to Patch B, and 0.15mL to Patch C together with the control group or Patch D to obtain the requisite data. The treatments were tested on laboratory rats induced with the same length of wounds measuring 1cm, and burns measuring 0.79cm^2. The experiment was conducted in triplicate, repeating the setup three times to ensure the reliability and accuracy of the data collected. Moreover, this study also aimed to determine if the difference of volume of application of the extracted oil has a significant effect on the time span of healing of the wounds and burns. Through one-way ANOVA test between the timeframe of wound healing and different level of oil extracts, the p-value of 1.53E-06 or 0.00000153 is less than the significance level of 0.05, which indicates that the null hypothesis is rejected and the varying levels of oil extract in the patch does have a significant effect on the timeframe of the wound healing process. Additionally, the test between the timeframe of burn healing and different levels of oil extracts showed the p-value of 1.37E-06 or 0.00000137 that falls below the significance level of 0.05. It indicates that the null hypothesis is rejected and varying levels of oil extract in the patch does have a significant effect on the timeframe of the burn healing process. Furthermore, based on the study's findings, it is concluded that a wound and burn healing patch infused with oil extracts of Gotu Kola is an efficient treatment for wounds and burns, specifically, Patch C with the highest level of oil extract being the most effective which showed the shortest healing time frame for both wounds and burns.