



**WOUND HEALING ACTIVITY OF CATHARANTHUS ROSEUS L.
(CHICHIRICA) LEAF ETHANOL EXTRACT IN STREPTOZOTOCIN-
INDUCED DIABETIC MUS MUSCULUS**

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ABSTRACT

The Philippines possesses a rich biodiversity of medicinal plants, a potent source of natural antioxidants. Phytomedicine wound healing are said to be widely accessible and are considered safe due to fact that it rarely causes hypersensitive reactions, allowing these organic substances from plants to be studied upon the regeneration and healing of the damaged tissue caused by wounds. That being the case, the researchers aimed to analyze the wound healing activity of Catharanthus roseus L. leaf ethanol extract through assessing the wound healing rate of the concocted product in streptozotocin-induced diabetic Mus musculus. Upon conducting the research, three experimental groups and a placebo control group were utilized in this triplicated investigation. The experimental groups are assigned with varied concentration solutions, 5%, 10%, and 15%, respectively. The quantitative data extracted on the experimentation supports an in-depth analysis of the information following the experimental research method with the

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posttest-only control group design approach of the study. Through the observational and statistical analyses, the application of ointment with different *Catharanthus roseus* L. leaves ethanolic extract concentration was concluded to have a significant effect to a wound in diabetic *Mus musculus* that has been induced by Streptozotocin. This was concluded after identifying that the F-computed value of 31.492 is of the higher value than the F-critical value of 7.591. Also, the rejection of the null hypothesis of the study was supported by the p-value result of the one-way analysis of variance of 8.851 E-05. Moreover, Experimental Setup C is the most capable of healing wounds under diabetic environment, considering the placebo group, as 70.19% of the inflicted wound with 400 mm² circular wound surface area underwent coagulation after 7 days of ointment application.

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