

## Comparative Wound Healing Potential of Mitracarpus villosus Ointment and Honey in Diabetic Albino Rats by Collagen Assessment

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**Abstract :** All humans will experience some type of wound in every lifetime. Most wounds heal quickly with little or no attention but, many people suffer from wounds that are complex and/or persistent therefore posing a burden. This study was designed to assess the efficacy of Mitracarpus villosus ointment against honey in diabetic rats. To achieve this, percentage wound closure and collagen assessments were used to express treatment efficacy. Results show that on day 21, rats treated with M. villosus ointment had the highest percentage closure (94.5%) while honey treated and non-treated recorded 90.0% and 83.3% respectively. Similarly, a significant difference ( $p < 0.05$ ) was observed on day 21 in the total collagen deposited in wounds of diabetic rats ( $10.57 \pm 0.7$ ) and M. villosus ointment treated wounds ( $11.77 \pm 0.4$ ) as compared with the non-treated diabetic rats. M. villosus ointment was efficacious in healing wounds in diabetic rats and heals wound faster than honey and may hold potential for wound healing in diabetes mellitus sufferers. However, the wound healing mechanism of this ointment

**Keywords :** collagen, diabetic rats, honey, Mitracarpus villosus, ointment, wound healing

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