

Herbal Cream Formulation for Wound Healing Activity: A Study on Crepe Jasmine (Tabernaemontana Divaricata)

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Abstract: Wounds, which disrupt the skin or underlying tissues, can range from minor cuts to severe injuries involving deeper structures. The healing process is complex, involving inflammation, tissue formation, and remodeling to restore the skin's function. Chronic wounds, particularly in individuals with conditions like diabetes or poor circulation, present a significant healthcare challenge due to prolonged healing times and a heightened risk of infection. Effective wound care is essential to prevent complications and ensure proper healing. With the increasing prevalence of antibiotic resistance, there is growing interest in alternative treatments, including plant-based remedies, to address wound care needs. **Key Benefits of Healing Creams: Promotes Skin Regeneration:** Many healing creams aid in speeding up the natural healing process of minor cuts, burns, and wounds by encouraging cell regeneration and reducing scarring. This study focuses on the development of a herbal cream incorporating Crepe Jasmine (*Tabernaemontana divaricata*), a plant known for its therapeutic effects on wound healing. The cream, formulated and rigorously tested for key properties such as stability, pH, viscosity, and microbial safety. The results revealed that the cream significantly enhanced tissue regeneration and accelerated wound healing compared to conventional treatments. The formulation exhibited notable anti-inflammatory, antibacterial, and antioxidant properties, suggesting its potential as a safer alternative to synthetic antibiotics. Moreover, the cream was found to stimulate collagen synthesis and improve epithelialization, which are essential processes for wound repair. This herbal cream holds promise for chronic wounds that are resistant to current treatments, providing a potential solution to the growing issue of antibiotic resistance. These findings highlight the potential of plant-based formulations in wound care and modern medicine..

Keywords: Herbal Wound Healing, Crepe Jasmine (*Tabernaemontana divaricata*), Anti-inflammatory and Antimicrobial, Natural Skin Regeneration, Collagen Synthesis

