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WOUND HEALING ACTIVITY OF *HIBISCUS TILIACEUS* L.

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ABSTRACT

The process of wound repair is a complex procedure where the skin or other parts of an organ refurbish itself after damage. Epidermal and dermal layers of the skin exist in a state of balance and provide a barrier from the external environment. Maintaining the continuity of these two layers by appropriate wound healing is of utmost importance for a homeostatic atmosphere. The objective of this study is to screen various extracts of *Hibiscus tiliaceus* leaves for its potential as a topical wound healing agent. Methanol, chloroform and water extracts of *H. tiliaceus* were incorporated into simple ointment base to make up to a concentration of 5 %. The wound healing activity was carried out on Wister albino rats using two different methods such as excision and incision wound models. The rate of wound contraction, tensile strength and period of epithelization were the parameters assessed to determine healing of wound. The findings of the observations revealed that all the extracts reduced the wound size and showed significant ($P < 0.001$) wound healing activity. The extent of healing was found to be highest ($P < 0.001$) for methanol treated group followed by ($P < 0.05$) chloroform and aqueous treated groups. Superior rate of wound contraction, less epithelialization time, greater tensile strength and histological characteristics suggest the therapeutic benefits of *H. tiliaceus* as a potent wound healing agent.

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