

To Formulate and Evaluate Herbal Cream from *Curcuma aromatica salisb*

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Abstract: Creams are considered an important part of cosmetic product as topical preparations. They have a variety of applications such as cleansing, beautifying, altering appearance, moisturizing etc. to skin protection against bacterial, fungal infections. Turmeric on the other hand, is extensively used in India for its aromatic, medicinal and cosmetic properties. It has been traditionally used as remedy for various diseases related to skin, cardiovascular and respiratory system. Research has been conducted in recent decades to establish pharmacological potential of wild Turmeric and its extracts, including anti-inflammatory, wound healing and safety properties. Cream formulated with *Curcuma aromatica* aim to harness its therapeutic properties, such as anti-inflammatory, antioxidant and antimicrobial effects. This cream provides natural alternative to conventional skincare products with minimal adverse effects. The active compound curcuminoids and essential oils, exhibit potent anti-inflammatory properties that can help reduce redness, swelling, and irritation of the skin. Additionally, it has ability to promote skin regeneration, making it beneficial for treating minor cuts, burns, and abrasions. In this literature review the focus on the use of pharmaceutical creams for wound healing with detailed discussion on healing process, preparation method, ingredients used and evaluation parameters. This study show that cream derived from *Curcuma aromatica* have beneficial effect on wound healing and also show other benefits.

Keywords: Wound healing, Herbal extract, Cream, Antiseptic, Anti- inflammation, Wild turmeric

I. INTRODUCTION



Creams are the topical preparations which can be applied on the skin. Creams are defined as “viscous liquid or semi-solid emulsions of either the oil in water or water in oil type” dosage forms which consistency varies by oil and water. Creams are used for cosmetic purposes such as cleansing, beautifying, improving appearances, protective or for therapeutic function.

These topical formulations are used for the localized effect for the delivery of the drug into the underlying layer of the skin or the mucous membrane. These products are designed to be used topically for the better site-specific delivery of the drug into the skin for skin disorder. Creams are considered as a pharmaceutical product as they are prepared based on techniques developed in the pharmaceutical industry unmedicated and medicated creams are highly used for the treatment of various skin conditions or dermatoses.

Creams can be ayurvedic, herbal or allopathic which are used by people according to their needs for their skin conditions. They contain one or more drugs substances dissolved or dispersed in a suitable base. Creams may be classified as o/w or w/o type of emulsion on the basis of phases. The practice of wound cleansing or antiseptic

management has a dichotomous history anchored in tradition and science. ‘Good’ care of wounds has been synonymous with topical prevention and management of microbial contamination. In fact, successful management of the contaminated wound must remove contaminants while inflicting minimal injury to tissues.

The rhizomes of *Curcuma aromatica* are used in traditional medicine for delaying the ageing process, wound healing, anti-inflammatory, cure burn rashes. The rhizome of the plant is rich in alkaloids, flavonoids, curcuminoids, tannins and terpenoids which are reported to be the reasons for its various pharmacological properties. The wild turmeric, belonging to the family Zingiberaceae, is a threatened aromatic medicinal plant, well known for its multifaceted properties. It is mentioned as 'Vanaharidra' in Ayurveda. After extraction of *Curcuma aromatica*, major chemical constituent found in the extract is Curcumin.

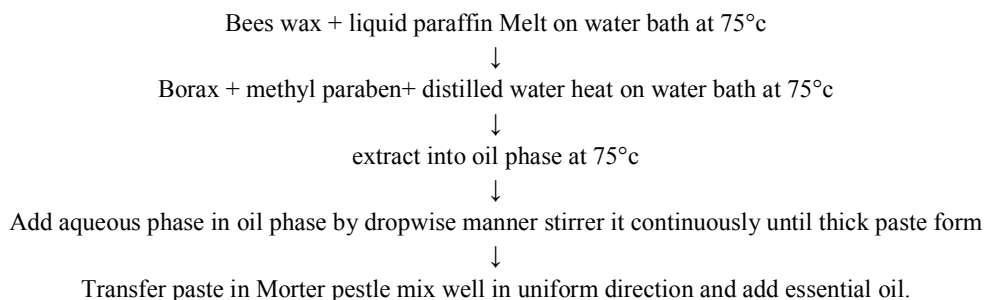
Curcumin is a polyphenolic compound that belong to class Curcuminoids. In addition of Curcumin, extract may also contain other curcuminoids, *essential oil and bioactive compound* that includes medicinal property of *Curcuma aromatica*. The plant also proves to be a promising for the development and designing of modern drugs for several diseases.

Medicinal uses - The medicinal property of *Curcuma aromatica* is well known. Apart from the antibacterial and antifungal activities, its cosmetic use in India. The paste of rhizome is used for facial application to reduce acne and excessive hair growth and also to improve skin tone and complexion. It is traditionally used for skin infections, arthritic pain and insect bites. The bioactive compounds of the plant have been proved for their anti-cancerous, anti-acne, antioxidant, anti-inflammatory, anti-allergic, antidiabetic and wound healing potentials. It is also used in native perfumeries.

Wound healing activity - The powdered rhizome of *Curcuma aromatica* exhibited wound healing activity. Studies also showed significant wound healing activity in excision wound models, conducted to assess the wound healing activity of topical application of *Curcuma aromatica* rhizome extracts and its cream formulations.

Anti- Inflammatory activity - Aqueous and alcoholic extracts showed anti – inflammatory activity. The ethanol extracts and formulation exhibited significant anti- inflammatory activity in arachidonic acid –induced ear inflammations. A study was also done on Anti-inflammatory effect of the essential oil from *Curcuma aromatica*.

Cream formulation-



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