

To Establish the Manufacturing of Medicated Soap

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ABSTRACT

A Medicated soap was formulated using the leaf and bark extract of *Azadirachta indica*, powder. Ayurvedic cosmetics are also known as the herbal cosmetics the natural content in the herbs does not have any side effect on the human body [5] most herbal supplement are based on several botanical ingredients with long histories of traditional or folk medicine usage. Among the numerous botanical ingredients available in the market today[6]. Numerous chemical toxins microorganism present in the atmosphere may cause chemical infection and damage to skin cosmetics alone are not sufficient to take care of skin and body parts. Neem (*Azadirachta indica*) tree has attracted worldwide prominence owing to its wide range of medicinal properties, neem leaves and its constituents have been demonstrated to exhibit anti-inflammatory, antihyperglycemic, antiulcer [7] antimalarial, antifungal, antibacterial, antimutagenic and anticarcinogenic properties. This study was conducted to evaluate the effect of aqueous, ethanolic and ethyl acetate extract from neem leaves. Herbal soap ingredients were used neem, lavender in which neem leaf and seed were found effective against some dermatophytes. [8]

KEYWORDS

Medicated Soap, formulation, *Azadirachta indica*

INTRODUCTION

Medicated soap preparation is a medicine or drugs that contain Antibacterial & antifungal agents which mainly uses of part of plants such as leaves, stem, roots & fruits for treatment of a injury or disease or to achieve good health [11]. This preparation possess antimicrobial property and is administered topically and available to apply in various forms like creams ,lotion, gel, soap, solvent extract or ointment .the variety of creams & soap properties

have been used to treat various skin disorders [12]. Mostly skin infection are caused by fungi, staphylococcus aureus and streptococcus species [11].

Ethnomedically, juice & extract from leaves of the plants are topically applied as antimicrobial and anti-inflammatory agents in treatment of skin disease including eczemas, ringworm and pruritus [13]. The succulent gel form is used to disorders of psoriasis. Crude preparation of soapy plant are able to soften the skin epidermis enhance greater penetration and cleaning acne and also promote healing and resolution in quick time.

In this review article medicated soap containing neem and lavender as natural plant ingredients because this content gives or shows antibacterial antifungal & anti-inflammatory activity. In this soap, neem is main compound, and shows medicinal properties. Neem leaf and its extract exhibit immunomodulatory anti-inflammatory, antiulcer antimalarial, antifungal antibacterial antioxidant anticarcinogenic property.



EXPERIMENTAL MATERIAL AND METHODS

Chemicals

These include stearic acid, soft paraffin, ethanol, Lavender oil, Citric Acid, Glycerine soap base, Vitamin E.

Collection, identification and processing of plant

The leaves of *Azadiracta indica* was collected from different matured plant. The leaves were dried in hot air oven, pulverized and stored in airtight bottles for the studies

Extraction

The *Azadiracta indica* powder was extracted with water by decoction process. 9 gm of above stated powder was taken in conical flask and extracted with water for four hours with occasional agitation, then filtered.

Formulation of medicated soap [10]

To obtain extract of *Azadiracta indica*, powder was incorporated into a soap formulated with basic glycerin soap and which contain 1 gm stearic acid, 0.70gm soft paraffin.

Weighed 1gm of stearic acid, 0.70gm soft paraffin, 5ml ethanol was taken. Glycerin basic soap was melted first and to it 1gm stearic acid, 0.70gm soft paraffin, 5ml ethanol were added. Extract was incorporated into melted solution with continuous agitation for 30 minutes until molten mixture became homogeneous. The semisolid mixture was poured into a mould and allowed to solidify.

Contents of the Soap

NEEM

Botanical name: *Azadiracta indica*

Part typically used: Leaves

Colour: Green

Description:- Compound alternate, rachis 15-25cm long, 0.1cm thick, leaflet with oblique, serrate, 7-8.5 cm long and 1-1.7 cm wide slightly yellowish green in color.

Constituents:-Flavonoids, Alkaloids, Azadirone, Nimbin, Nimbidin, Terpenoids, Steroids, Margosicacid, Vanilic acid, Glycosides, B-sitosterol, Nimbectin, Kaempeerol, Quercusertin are present in Neem Leaf.

Table1 List of Chemicals

Chemicals	Source
Ethanol	Laboratory reagent
Stearic acid	Laboratory reagent

Soft paraffin	Laboratory reagent
Lavender oil	Laboratory reagent
Citric Acid	Laboratory reagent
Glycerine soap base	Laboratory reagent
Vitamin E	Laboratory reagent

Table 2 List of Herb

Herbal plant	Source
Neem	Plant

FORMULA [1]:

The formula shown in Table 3 is best suited for the preparation of medicated soaps.

Sr. No.	Ingredients	Quantity (%)	Use
1	Stearic Acid	1 gm	Hardening
2	Soft Paraffin	0.70	Hardening
3	Ethanol	5ml	Solvent
4	Neem Powder	4gm	Antibacterial
5	Glycerine soap base	35g	Binding agent
6	Vitamin E	1ml	Moisturizing agent
7	Lavender oil	2ml	Essential oil
8	Citric Acid	2g	Preservation

Evaluations [3, 5]

The herbal soap formulated was evaluated for the following:

1. organoleptic evaluation:-

- i. Colour:- brown
- ii. Odour:- orange
- iii. Appearance:- Good

2. Physical evaluation [2, 4]

The medicated soap formulated was evaluated for the following properties:

- a) **pH :-** the pH was determined by using pH paper .the pH was found to be basic in nature
- b) **Foam retention:-** 25 ml of the one percent soap solution was taken into a 100 ml graduated measuring cylinder the cylinder was covered with hand and shaken 10 times .

the volume of foam at 1 minutes interval for 4 minutes was recorded. It was found to be 5 minutes .

c) Foam height:- 10 cm

d) Antimicrobial test :- there was various study conducted on antimicrobial activity of neem and hence according to research paper by antimicrobial activity of *Azadirachta indica* leaf, bark and seed extract.

CONCLUSION

The plant *Azadirachta indica* was extracted using water and subjected to various evaluation test according to previous research the antimicrobial activity of Neem was studied.

The prepared formulation when tested for different test gave good results. It does not give any irritancy to skin it was determined by using these soap by few volunteer hence it is proved that soap does not give any irritancy to skin . Furthermore the prepared soap were standardized by evaluating various physic chemical properties such as pH appearance odour in which the exhibit satisfactory effect.

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