

# Formulation And Evaluation of Herbal Soap by Using Herbal Plant

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**Abstract**— A herbal soap and sanitizer was formulated using the leaf and bark extract of *Azadirachta Indica*, *Ocimum tenuiflorum*, *Sapindus mukorssi* and *Acacia concinna* powder. Ayurvedic cosmetic are also known as the herbal cosmetics the natural content in the in the herbs does the not have any side effects on the human body most herbal supplements are based on serval botanical ingredients with long histories of traditional or folk medicine usages (6). Neem tree has attracted worldwide prominence owing to wide range of medical properties, neem, leaves and its constituent have been demonstrated to exhibit anti-inflammatory, hyperglycaemia, anti-ulcer antimalarial, anti-fungal, antibacterial, anti mutagenenic, and anti-carcinogenic, properties. herbal soap ingredients were used reetha, neem, shikekai and Tulsi. In which Neem leaf and seed were found effective against some dermatophytes. Shikekai and reetha acts as a detergent and having cleaning and foaming activity and Tulsi shows antiviral activity (5)

**Index Terms**— Herbal soap, formulation, hand sanitizer, *Azadirachta indica*, *Ocimum tenuiflorum*.

## I. INTRODUCTION

Herbal Soap is Preparation medicine or Drug it Contain Antibacterial and Anti-fungal agent which are mainly use in part of plant such as the leaves, steam, roots and fruits to treatment for an injury or achieve good health (1). This preparation possess antimicrobial property are administered topically and available to apply in various forms like cream, lotion, gel, soap, solvent extract or ointment. the variety of creams and soap properties have been used to treat various skin disorders (2). Mostly skin infection are caused by fungi staphylococcus aureus and streptococcus species (1).Ethnomedically , juice and extract from leaves of the plant are topically applied as antimicrobial and anti-inflammatory agent in treatment of skin disease including eczema's ,ringworm and pruritus(3). the succulent gel from is

used to disorder of psoriasis. Crude preparation of soapy plant are able to soften the skin epidermis acne and also promote healing and resolution in quickly in time. In this review article herbal soap containing Neem, tulsi, shikekai and reetha as natural plant ingredients and this contain gives or shows antibacterial. anti-fungal antibacterial antioxidant anti-carcinogenic property . Tulsi has got the greatest medicinal value. Tulsi to be effective for diabetes they blood glucose level tulsi also used in serve acute respiratory syndrome. juice of its leaves gives relief in cold fever bronchitis and cough . tulsi reduce stress, enhance stamina inflammation and also shows anti-fungal activity so tulsi also used main compound in this herbal serve to be beneficial in soap formulation (4). Reetha is an exceptional cleanser. hence it's a perfect substitute for soap and face-wash due the presence of saponin . it is also good for use in sensitive skin. a combination of reetha and chickpeas gives a gentle and enriching experience to the skin it has conditioning properties ,it keep skin moisturized and cool. reetha prevents the skin from drying and keeps it soft and supply it also helps to treat eczema and psoriasis. Shikekai is quit effective in treating various infection like scabies and also used as anti wrinkles property (4).

## Skin Type and Basic Skin Care

The requirement for the basic skin care

A) Cleaning agent- Which remove the dust dead cell and die that chokes the pores on the skin. Some of the common dean-es include oils like coconuts, sesame and palm oil.

B) Use of Toners - the toners help to tighten the skin and keep it from being exposed to many of the toxins that are floating in the air and environmental pollutants. some of herbal used as toners are which hazel, geranium, sage, lemon, ivy, burdock and

essential oils.

C) Moisturizing- The moisturizing help the skin to become soft and supple. Moisturizing shows a healthy glow and are less prone to aging some of the herbal moisturizing include vegetable glycerine s orbital, rose water, jojoba oil, aloe Vera and iris.

Most common skin disease

Most common skin disease are Enzama, Acne, Rashes, Psoriasis, Allergy, Dry skin,Urticaria etc.

Content of the soap

### 1. NEEM

Synonym - Indian lilac

Biological Source - it consists of the fresh or dried leaves of Azadirachta indica.

Part of Typically used- Leaves

Color- Green

Uses- Remove the dark spots, make your skin healthy.



### 2. TULSI

Synonym- Gauri, sulabha

Biological source - it consist of the fresh and dried laves of Ocimum tenuiflorum .

Part of typically used - leaves

Colour - Green

Uses - Fight acne, reduce pigmentation.



### 3. REETHA

Synonym- Soap berry

Biological source- It consist of dried seeds sapindus mukorossi.

Part of typically used- seeds

Colour - Brown

Uses- It clean oily secretions in the skin.



### 4. SHIKEKAI

Synonym- Viral a, sari

Biological Source - it consists of fruits of plant Acacia

Part of typically used - Fruits pods

Colour - Brown

Uses- Anti-dandruff detergent.



II. EXPERIMENTAL MATERIAL AND METHODS

Material.

Ingredients	Name of suppliers
Coconut oil	College lab
Caustic soda	College lab
Glycerine	College lab
Stearic acid	College lab
Ethanol	College lab
Soft paraffin	College lab
Triethanolamine	College lab
Sodium lauryl sulphate	College lab
Rose water	College lab

Evaluation (7, 9)

The herbal soap formulated was evaluated for the following.

1. Organoleptic evaluation.

- a). Colour: - brown
- b) Odour: - Aromatic
- c) Appearance: -Good

2. Evaluation: - (8,10)

The herbal 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 10 minutes times. The volume of the foam at 1 minute's interval for 4 minutes was recovered. it was found to be 5 minutes.
- c) Foam height - 10 cm

3. Antimicrobial test: - there was various study conducted on antimicrobial activity of neem and hence according activity of Azadirachta indica leaf, bark and seed extract.

CONCLUSION

The plant Azadirachta indica, Ocimum Tenuiflorum, Sapindus and Acacia concinna were 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 tests gave good results. It does not give any irritant to skin as was determined by using this soap by few volunteers hence it is proved that soap does not prepared soap were standardized by evaluating various physical and chemical properties such as pH, appearance, odour in which the exhibit satisfactory effect.

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