



FORMULATION AND EVALUATION OF HERBAL NEEM AND TURMERIC SOAP

Raja Kumar¹, Md Shoib Akhtar², Mansi Gupta*

Corporate Institute of Pharmacy, Bhopal

ABSTRACT

The formulation of the herbal soap included neem leaf, Aloe Vera, tulshi, vitamin C, and tocopheryl acetate. Ayurvedic cosmetics are extremely beneficial and have no negative side effects. Herbal cosmetics is another name for ayurvedic cosmetics. All natural ingredients are readily available at local herbal markets. Cosmetics are a component of taking care of the skin and other body parts because of the dangerous UV rays and other pollutants that are present in today's environment. The chemical components of neem, which also contain anti-inflammatory, anti-hyperglycemic, anti-ulcer, anti-malarial, anti-fungal, anti-bacterial, antimutagenic, and anticarcinogenic qualities, have been scientifically proven to work. The aloe plant yields a material that is used in cosmetic goods to cure burns, psoriasis, and even acne. Products for skin care often contain tocopheryl acetate. Tocopheryl acetate's anti-inflammatory and antioxidant qualities can help prevent skin ageing brought on by free radicals from UV exposure. Tushi has several skin advantages, including as skin-cleansing beeps. Vitamin C and turmeric are also used to treat acne and brighten skin tone. Herbal soap preparation is a medication or treatment with therapeutic benefits for the skin, including antibacterial and antifungal qualities. The unprocessed medication that is used to make soap has several medicinal or cosmetic properties. The plant that is used to make soap has the ability to soften skin epidermis, provide greater penetration, eradicate acne, and promote healing and resolution in a short period of time.

KEYWORDS: Herbal Soap, Neem, Tulshi, Vit. C., Vit. E., Aloevera, Turmeric, Rose Water, Soap Base, Lavendar Essential Oil.

1. INTRODUCTION

Neem, tulshi, vitamin C, tocopheryl acetate, alovera, and glycerine soap base are the major ingredients in this soap recipe. This component offers it a characteristic or several beneficial effects on the skin. Neem is the most efficient because it demonstrates several properties, such as antibacterial and antifungal properties, or the ability to treat numerous skin issues. the neem leaves used to make the soap. The making of soap also calls for tulshi. The skin is deeply cleaned, acne is treated, and the skin tone is lightened, among other things. Acute respiratory syndrome was another term used by tulshi. Tulshi is also utilised by diabetic individuals to lower blood sugar levels. Colds, flu, bronchitis, and coughs are all alleviated by tulshi leaf juice. Tulshi provides additional benefits by lowering stress and boosting stamina. It is also utilised as a primary ingredient. Alovera is used as a moisturiser, to prevent signs of ageing, to lessen stretch marks, to lessen acne, to help lighten blemishes, and to minimise acne. Alovera also provides skin that is smooth and supple. For moisturised skin, rose water is utilised in the manufacture of soap. This soap primarily provides antibacterial, antifungal, skin-lightening, acne-removal, and smoothing or moisturising properties.

2. METHODOLOGY

2.01 Chemical

Rose water, lavender essential oil, and a glycerine soap base.

Extraction and gathering.

Neem leaves are taken from the live plant, carefully washed, and dried. The similar approach was employed by Tulshi Leave.

Neem leaf extraction involves mixing the leaf in a mixture and extracting it using the same technique as tulshi leaf. the actual alovera gel extract. The outcomes of the soap are excellent with this extraction.

2.02 Content of the soap

➤ Neem

Botanical name- Azadiracta indica.

Part typically used- Leave.



Color- Green.

Constituents- flavonoids, Alkaloids, Azadirone, nimbin, nimbidin, terpenoid, steroids.



➤ **Tulshi**

Biological name- *Ocimum tenuiflorum*.

Common name- holy basil.

Chemical constituents- eugenol germaceterpens.

Part typically used- leaves.

Colour- Green



➤ **Alovera**

Biological name- Aloe Vera.

Common name- Aloe barbadensis Miller.

Chemical constituents- vitamin, enzyme, minerals, sugars, lignin, saponin, salicylic acid and aminacid.

Part typically used- leaves

Color- Green



- **Turmeric**
Biological name: curcuma longa
Common name: haldi
Part typically used: root



- **Vit-C.**
- **Vit-E**
- **Lavendar essential oil.**

Formulation :

Table [1]

Chemical	Source
Lavendar essential oil	Laboratory reagent
Rose water	Laboratory reagent
Soap vax	Laboratory reagent

Table [2]

Herbal plant	source
Neem	Leves
Tulshi	Leves
Lemon	Fruit
Turmeric	Root
Vit.E	Capsule

**Table [3]**

Ingredients	Quantity
Neem	6g
Tulshi	2g
Aloevera	4g
Vit.c	1g
Turmeric powder	0.5g
Vit.E	1.5g
Soap vaxx	12g
Rose water	4g
Lavendar essential oil	1g

3.METHODOLOGY

Add 6 grammes of neem powder to a beaker, then to this beaker, add 2 grammes of tulshi, 4 grammes of aloe, 1 gramme of vitamin C, 1.5 gramme of vitamin E, 3 ml of rosewater, and 0.5 grammes of turmeric, and stir for two to three minutes. Giving a span on induction and adding some water, then taking a tiny amount of water and adding 12g of glycerine soap base in the container, causes the glycerine soap base to melt using the twofold heat technique. Mix when base has melted. All of the soap's ingredients are melted, combined, and heated to a final temperature before the addition of lavender essential oil to the preparation solution is given in a little, soap-shaped container. The final soap has been prepared and is pouring.

- Neem's antimicrobial qualities are used to treat acne.
- Aloe vera may soothe sunburns or dry skin.
- Antimicrobial properties of turmeric can heal wounds and smooth wrinkles.
- Antimicrobial agents are tulshi.
- Rose water is a soothing emollient.

3.01 Use of Soap

Treating acne Neem's antibacterial characteristics aid in treatment and prevention of acne by battling acne-causing germs. fights off blackheads and whiteheads. Aloe vera is a natural moisturiser that gives skin hydration without making it feel oily. Anybody with oily skin will thus love it. Moreover, it combats acne and sunburn. For all skin issues, this soap is often used.

4. EVALUATION

(1)Physical properties

Color – dark Green.

(2)Thermal stability

Thermal stability of the formulation was determined by the humidity chamber controlled at 60-70/ RH at room temperature. This soap is mainly stable at room temperature temperature increases it mainly unstable.

(3)Determination of PH

5 to 6 g of the soap was weighted accurately in a 100ml beaker 40ml water was added and dispersed the soap in it. The pH of the solution is determined by using ph meter. PH of soap is 9.5.

(4)Stability studies

The stability studies were carried out as per ICH guidelines. the soap filled in bottle and keep in humidity chamber maintained at 30 to 2 ,60 to 5 and 70 to 5/ RH for two months. At the end of studies sample were analysed for the physical properties and viscosity. High moisture content it will be affect on the soap

(5)Microbial growth

Agar plates were used, and the plates were incubated at 37°C for 24 hours before being compared to standards.

(6)Foaming ability and foam stability

Using the cylinder shaking method, foaming capacity was assessed. brietel Each cylinder was filled with 40ml of the soap formulation solution. The entire volume of the foam content after 1 minute of shaking recovered foam stability was assessed by noting the foam volume after 1 minute and 4 minutes is 80 to 93/ foam generated. It was covered with one hand and shook ten times.



REFERENCES

1. *Azadirachta Indica Extract as skin solution Soap* Mazni Musa, Norul Azilah Abdul Rahman, Nur Rahimah Said, Nuru Huda Abdul Halim and Jamil Mohamed Sapari .*Journal of Academia* Vo. 7, Issue 2 (2019) 159- 163.
2. *Herbal Remedies of Azadirachta indica and its Medicinal Application*,Debjit Bhowmik*,Chiranjib1, Jitender Yadav ,K. K. Tripathi, K. P. Sampath Kumar.*J. Chem. Pharm. Res.*, 2010, 2(1): 62-7.
3. *Formulation and Evaluation of Herbal Soap* Ashlesha Ghanwat, Sachin Wayzod and Vanjire Divya *Current Trends in Pharmacy and Pharmaceutical Chemistry*,2(2),2020,21-26.
4. *International Journal of Scientific Development and Research (IJS DR)* www.ijsdr.org 301,*Formulation and Evaluation of Polyvalent Herbal Cream*, Rimi Mondal, Dr. Arvind Negi, Dr. Manish Mishra,February 2021 IJS DR Volume 6 Issue 2 IJS DR2102043.
5. *Development and Characterization of Herbal Soap Using Borassus flabellifer and Curcuma zedoaria*.Devipriya Nisha P*, Nivetha L, Deepak Kumar U.*Int. J. Pharm. Sci. Rev. Res.*, 69(2), July – August 2021; Article No. 20, Pages: 134-139.
6. *and Evaluation of Poly Herbal Anti Bacterial Soap* G. Sucharita, V. Ganesh, B. Siva Krishn, D. Sireesha, S. Pavan kumar, N. Sai Sasidhar, S. Revathi, Dr. P. Venkatesh,*IJESC* Volume 10, issue no 8,2020.
7. Shivanand, P., Nilam, M., & Viral, D. (2010). *Herbs play an important role in the field of cosmetics. International Journal of PharmTech Research*, 2(1), 632-639.