



## Synthesis of herbal cosmetics by using plant material neem (*azadirachta indica*) & chandan (*santalum album*.)

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### Abstract

Now a day the herbal cosmetic have been the first choice of the customer, for being more potent, easily available & through to be no side effective herbal cosmetics is the fastest growing field of personal care products these are cosmetics preparation which contain biological active principles are ingredients of a plant origin in recent years there is an increased demand for the use of herbs in cosmetics due to their mild action and list of second nature and they are found to be more effective the desire of a good looking and to be beautiful give a huge market for the herbal cosmetic Now a days desire to be look younger than original age to be look beautiful face charming and fair have directly increase the demand of herbal cosmetics as well as of the cosmetics in the

**Keywords:** Herbal, cosmetics, neem, chandan, vitamin E

### Introduction

The word cosmetic was derived from the Greek Word "Kosm Tikos" meaning having the power arrange skill in decorating cosmetics is the fastest segment of the personal care product and these are a cosmetics product which containing biological active principles and ingredient of plant origin. To study the functions and efficiency of naturally derived ingredients for the use in herbal cosmetics A new branch of a science is developed known as a "Cosmetic phytognosis" which deals with biochemical properties of a plant derived ingredients to be used in herbal cosmetics the use of a natural her ingredients in personal and health care product has been emerged for its better experience is herbal cosmetic referred as a product formulated by various natural herb ingredients are used in as a base in preparation of effective herbal cosmetic or do not a product instant cures. They offer away to put the body in proper tune with nature the demand of a herbal medicine is increasing rapidly due to their skin friendliness and lack of a side effect.

The best thing of the herbal cosmetics is that it is a purely made by the herbs and shrub and the side effect free.

### Advantages of Herbal Cosmetics over Synthesis

**Naturally Available:** Herbal cosmetics are made by herbs which is easily available from nature, they are a free from all the harmful synthetic chemicals.

**Safer to Use:** As compare to synthetic products, herbal cosmetics are safe to use, they are not toxic less allergenic, since they are made of natural ingredients.

**Economical to Use:** World health organization currently recommended and encourages traditional herbal care in natural health Care programs as this drug are easily available at low cost and are comparatively safe.

**Cosmeceutical:** Cosmeceutical is fastest growing segment of the beauty industry. Cosmeceuticles are cosmetic pharmaceutical product intended to improve the health and

beauty of the skin by providing a specific result ranging from acne control, skin protection to anti wrinkle. They are skin protecting as well as skin glowing agent.

### Skin care

#### a. Neem- (*Azadirachta indica*)

Neem helps to prevent blackheads and whiteheads which are some of the very common skin problems these days. Being an exfoliating agent, neem pulls out the dead skin cells, and impurities from the skin and leaves it feeling clear and radiant.

#### b. Chandan (*Santalum album*)

Sandalwood, or "Chandan," is a popular ingredient in Ayurvedic skincare, known for its anti-inflammatory, antimicrobial, and skin-lightening properties, used to soothe irritation, reduce redness, and combat acne, promoting an even skin tone and healthy glow.

### Vitamin E

Vitamin E, a powerful antioxidant, is a popular skincare ingredient due to its moisturizing, protective, and anti-aging properties, making it a valuable addition to skincare routines for healthy, radiant skin.

**Hydration and Moisture:** Vitamin E helps the skin retain moisture, preventing dryness and flakiness.

**Antioxidant Protection:** As an antioxidant, vitamin E protects skin cells from damage caused by free radicals, which can lead to premature aging.

**Skin Barrier Support:** Vitamin E strengthens the skin's natural barrier, helping it to retain moisture and protect against external stressors.

**Soothing and Calming:** Vitamin E's anti-inflammatory properties can help soothe irritated or inflamed skin.

**Potential for Wound Healing:**

Some studies suggest that topical vitamin E may aid in wound healing.

### Reduced Appearance of Fine Lines and Wrinkles

By promoting skin hydration and protecting against damage, vitamin E can help reduce the appearance of fine lines and wrinkles.

**Protection from Sun Damage:** Vitamin E can help protect the skin from the harmful effects of the sun, reducing the risk of sunburn and premature aging.

**Treatment of Hyperpigmentation and Dark Spots:** Vitamin E's antioxidant and anti-inflammatory properties can help reduce the appearance of dark spots and hyperpigmentation.

**Reduces Acne Scars:** Vitamin E's anti-inflammatory properties can help reduce the appearance of acne scars.

### Materials and methods: Soap (Herbal soap): - 1) Neem Herbal Soap

Neem, known for its antibacterial and antifungal properties, helps in combating acne and soothing irritated skin. It also aids in reducing dark spots and pigmentation, giving the skin a clearer and even tone. Tulsi, often referred to as the "queen of herbs," is rich in antioxidants and essential nutrients. Neem soap is one of India's most used herbal skin items. The cleanser is an antibacterial Clearing up skin rashes, inflammation & dermatitis. It is also clears acne & pimples, & Helps detoxify the skin cells of population.

#### Material

**Plant material:** Azadirachta indica (Neem) leaves.

**Chemicals:** Glycerine soap base **Apparatus:** Beaker, gas, spatula.

#### Method

- Take a leave of neem.
- Cut & melt the soap base.
- Add in the neem powder into the soap base.
- Add Essential oil.
- Pour into moulds & let harder.
- Cut & enjoy

### Chandan soap

It is ideal for controlling acne & promote an even skin tone. Sandalwood helps treat acne and reduce signs of ageing. Turmeric improves skin tone and clears off blemishes.

**Material:** Chandan powder, vitamin E, Glycerine soap base.

**Apparatus:** Beaker, gas, spatula

#### Method

- Take a Chandan powder.
- Then after add into the soap base.
- After adding Vitamin E & glycerine.
- Add colorine and Essential.
- Hit it & melt.
- Pour into moulds & let harder (use freeze)
- Cut & enjoy.

### Result & Discussion

#### Herbal Neem soap

Of the soap was Found to be 6.5 with pH strip. Remaining parameters such as foam height, foam retention moisture

Content, and were also determined.

Foam Height was found to be: 2.7 Foam Retention was found to be 5.4 min Moisture Content in soap

#### Skin Irritation Test

Soap was applied on skin of hands and legs of 5 volunteers and observed.

#### Physical Ability

When soap is placed in a hot temperature for more than 10-15 min it enters into gel phase and the colour

#### Chandan soap

Formulation of Soap

S. No Ingredient Quantity Uses

1. Soap Base 55 g Remove dirt
2. Sandal wood powder 2 g Remove suntan, glowing skin

#### Skin Irritation Test

Soap was applied on skin of hands and legs of 5 volunteers and observed.

#### Physical Ability

When soap is placed in a hot temperature for more than 10-15 min it enters into gel phase and the colour

#### Discussion

The present work is concerned with the formulation of soap using extract of neem and Tulsi. The Formulated soap was a dry, stable solid showing no colour change and good appearance and is foamy in Nature. It showed good skin compatibility and causes no irritation when tested on 5 volunteers.

#### Conclusion

In comparison to other cosmetic product available in the market natural and herbal cosmetic are easy, safe & effective to use. One of the main Reason of herbal products used in that they can be used for all skin type. The formulated soap showed considerable antibacterial activity as the commercial standard and all the Other parameters were good. It does not give any irritancy to skin it was determined by Using these soaps by few volunteers hence it is proved that soap does not give any irritancy to skin.

Furthermore, the prepared soap were standardized by evaluating various physico chemical properties

Such as pH appearance odour in which the exhibit satisfactory effect. The soap was free from harsh Chemicals which are used in commercial soaps. Herbal soap can be used as a promising alternative to Commercial chemical containing skin whitening soaps.

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