

Formulation and Evaluation of Herbal Toner Prepared Using Various Herbal Entities

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Abstract—In comparison to chemical medicines, natural therapies are more effective, safer, and have less side effects. On the global market, natural component formulations are becoming more and more prevalent. Topical pharmaceutical delivery systems have the advantages of rapid drug administration to the site of action and long-lasting effects. The skin is the primary route for medicine delivery in TDDS. Making a natural face toner using *Chrysanthemum Indicum*, *Aloe vera*, *Tulsi*, lemongrass and rose water are some of the all-natural elements for your skin. Herbal face toners are judged on their antimicrobial activity, colour, odour, pH, and skin irritability test, among other things. Its effectiveness was evaluated and compared with a face toner that is sold commercially. The results were within reasonable limits and had little to no adverse effects. The efficiency of herbal face toner on our face skin and its compatibility for all skin types make it clear that it is far superior to the synthetic face toners that are now on the market. The aim of this study was to develop a herbal face toner that comprised herbal extract used for both anti-inflammatory and bacterial growth prevention. This herbal toner's goals include rehydrating skin, balancing skin pH, tightening skin pores, reducing irritation, and keeping skin germ-free. Herbal face toner is used to promote blood flow, revitalise, and aid in maintaining the skin's elasticity. Herbal cosmetics have the advantage of being non-toxic, reducing allergic reactions, and containing components that have a long history of being effective. So, in the current investigation, we discovered the face toner's beneficial characteristics. This project's goal is to formulate and assess the manufacturing. It is a herbal remedy that is natural and safe and has a calming, relaxing, and irritating impact on the face.

Index Terms -Herbal Toner, Evaluation, Formulation, Natural ingredients.

INTRODUCTION

The term "herbal cosmetics" refers to products made with phyto-chemicals derived from a variety of botanical sources that influence skin functions and

supply nutrients essential for both healthy skin and body. Herbal cosmetics are natural herbs, products, and extracts utilised in cosmetic preparation for their aromatic value. Herbal toner is a type of skincare product derived from natural materials like herbs, flowers, and other extracts from plants. It is used after cleansing to help remove any dirt or impurities still on the skin and to prepare the skin for additional skincare products, such as moisturiser. All skin types can benefit from using herbal toners, but those with sensitive or dry skin should especially consider them because they can help to reduce sensitivity and provide additional hydration. Additionally, they can be used as a mid-day pick-me-up to hydrate and freshen the skin. The objectives of this herbal toner is rehydrating skin, balancing skin pH, tightening skin pores, relieving irritation, and also germ-free.

Effects of A Toner on Skin

Skin toner was once a common product used as a second washing agent to remove leftover makeup after thorough face cleansing or to remove extra sebum created by the facial skin in order to prepare the skin for nourishing treatments. For different skin types, such as oily skin, sensitive skin, or combination skin, toners can be divided into alcohol-based and non-alcohol-based varieties. Skin toners are now used more frequently as cosmeceuticals solutions with a variety of functions, including rehydrating skin, balancing skin pH, tightening skin pores, reducing irritation, and also antiseptis.

Advantages of herbal face toner

Herbal face toners offer several advantages for the skin, including, The pH of the skin must be balanced in order to maintain healthy skin, and herbal toners' natural constituents can assist in this process.

Tightening pores: Herbal toners are helpful in pore-tightening, which may reduce the visibility of blackheads and acne.

Hydrating the skin: The skin can be hydrated by using a variety of herbal toners, which can leave the skin looking smooth and moisturised.

Soothing the skin: Ingredients like chamomile and aloe vera, which have soothing characteristics and may soothe irritated or inflamed skin, are frequently found in herbal toners.

Remove impurities: Herbal toners are helpful in clearing the skin of any leftover impurities, such as oil and grime, which can cause breakouts and other skin problems.

Enhancing absorption: Before using other skincare products, using a herbal toner can assist to improve their absorption and increase their effectiveness.

Refreshing the skin: Herbal toners can provide the skin a restoring and energizing experience, making it feel refreshed and energized.

Overall, including a herbal face toner to your daily skincare routine will make your skin look and feel its best while also enhancing its health and attractiveness. Natural ingredient used in herbal face toner is Aloe vera, Peppermint, Rose oil, Lemmon grass etc which give Anti-inflammatory effect, Hydrate the skin, help to protect skin also Neem, Termeric, tea tree oil is used in toner

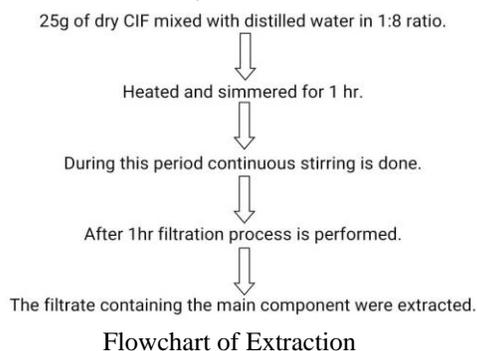
MATERIAL

Table no.1 - Material for Herbal face Toner

Sr.no.	Name of Ingredients	Manufacturing /company
1.	Aloe vera	Botanical Garden
2.	Tulsi	Botanical Garden
3.	Rose water	Research lab fine chem. industries
4.	Lemmon grass	Botanical Garden

METHODS OF EXTRACTION

EXTRACTION OF *Chrysanthemum Indicum*



Formulation table –

Sr. No.	Ingredients	F1	F2	F3
1.	Aloe vera	1	1	2
2.	Crysanthemum Extract	14	14	10
3.	Tulsi	20	22	23
4.	Rose water	8.6	6.6	5.6
5.	Lemmon grass	4	2	3
6.	Distilled water	Q.S	Q.S	Q.S

Table No. 2 – Formula For Herbal Face Toner



Fig. no. 1

METHOD

Take tulsi leaves transfer it into 100 ml of water. Boil it for 15 min at 55-60°C. Then take lemmon grass into another beaker and add 20 ml water and boil it gently. Collect the juice of aloe vera into the beaker. Filter the all liquid extracts.

22ml of Tulsi extract and 14 ml Crysanthamum extract take in a beaker and stir it. Add the 6.6 ml rose water in above mixture. Then add the 2 ml of lemon grass and the 1ml aloe vera extract. Makeup the volume with distilled water and stir the mixture.

Evaluation of Lip-balm

Organoleptic properties

The organoleptic characteristics of herbal face toner, such as colour, odour, and appearance, were investigated.

Homogeneity

Visual inspection was used to assess homogeneity for the presence of any clogs and their appearance.

Surface tension

They are able to determine whether the toner will distribute evenly throughout the skin or if it might form droplets or uneven spots. This knowledge is

important for ensuring that the toner is used correctly and that the user has a consistent experience. The stalagmometer collected the formulation, and the surface tension was measured.

Skin irritation

A small amount of the toner was sprayed on the left hand's dorsal skin and left there for a while; the results showed that the skin was not irritated.

Skin Conditioning

After using the toner, the skin was seen to be moisturised, smooth, and supple.

Temperature variations

The formulation was exposed to different temperature at room temperature (25°C), refrigerated (5°C), and oven temperature (45°C) over a 30-day to check stability

pH measurement

pH testing is used in herbal toners to determine their acidity or alkalinity levels. This information is important because it helps ensure that the toner is within the desired pH range for optimal skin health and effectiveness. The 25ml formulation was placed in a beaker with graduations and the calibrated pH metre was placed in the formulation for a period of time, and the measurement was taken.

Light exposure testing

To check for product discolouration, the product is left in its actual packaging in a light chamber or under direct sunlight for 48 hours.

Perfume stability:

The formulation herbal face toner was applied after 30 days, to record fragrance.

RESULT

Sr.No.	Evaluation Parameter	Observewd Value
1.	Description	Liquid
2.	Organoleptic Properties	-
2.1	Colour	Light yellow
2.2	Odour	Pleasant
2.3	Appearance	Smooth
3.	Consistency	Good
4.	pH Measurement	4.84
5.	Skin Irritation	No
6.	Surface Tension	60.52dyne/cm

Table No. 3 Evaluation Parameter & Result

DISCUSSION

Various physicochemical experiments were carried out in order to determine the final expression. All tests were carried out in accordance with each test's normal operating procedure. All of the results were noted and discovered to be within the expected ranges. The range was observed for the pH, surface tension, stickiness, skin condition, spreadability, and stability. After being exposed to light, the formulation displayed no indications of discoloration. Additionally, the formulation's ability to condition the skin while becoming non-irritating was successful. Finally, it was discovered that toner was able to removed very easily. These natural, risk-free substances, which are also found in day-to-day living, were used to make this herbal composition, particularly in toner form. The key reason for making it as a toner was so that it would be spreadable and easy to apply. Additionally, creating a toner was designed to see if they could get the cleansing effect in a liquid form. It was confirmed to be satisfactory after looking at the observations and the outcomes. When applied, the solution had a very calming, cleansing, toning effect on the skin, which was most crucial. It produced a tighter skin sensation.

CONCLUSION

The results from the spray tonner formulation were very satisfactory It was established from that research that the herbal face toner prepared for the smoothing, soothing, and astringent impacts on the skin is helpful. The majority of people prefer using natural products because they are easy to use and have no negative side effects. The spray toner formulation produced extremely pleasing results. All of the items have been purchased fresh at the local market and were both cost-effective and convenient. The pH of the herbal face toner is in the same range as that of skin. The herbal toner's liquid form can be used directly to dried skin to regenerate and improve its health. In terms of antioxidant and astringent activity, it was also discovered that lemongrass and Tulsi produced the highest results. The outcomes of the toner evaluation study are clear. It is proposed that the developed formulation is physiochemically stable and has properties similar to those of a typical skincare cosmeceutical formulation.

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