



Formulation and Evaluation of Herbal Face Toner

Yashaswee Arvind Jadhav¹, Vishal J. Gaikwad²

Guide²

Dr. Naikwadi College of Pharmacy, Jamgoan Sinnar

ABSTRACT

Regular cures make lesser side impacts, secure and furthermore acceptable than substance ones. In the world market, details with regular fixings have more accessible. For conveying the medication immediately to the site of activity, which gives delayed activity is the advantages of skin drug conveyance framework. Skin is the principal way of conveyance of medication in TDDS. The fixings are effectively accessible which are being utilized. They are effectively accessible as well as has healthy benefit according to effective perspective and more efficient. To form and assess the definition is the rationale of this task. It is regular and safe natural readiness which gives quieting, alleviating and astringent impact on the face. The regular fixings like aloe vera, cucumber additionally the peppermint, lemongrass and rose water utilized in the definition. It having capacity to diminish the facial disturbance as well as to improve excellence. We can involve it in our day to day occupied plan. Face toner is assessed for its physicochemical properties, surface pressure, pH and dependability. Most well known benefits of home grown beauty care products are, they are non poisonous in nature and they having tendency to decrease unfavorably susceptible responses.

The primary purpose for this review, we tracked down great properties of the face toner. Expansion of items that are gotten from rejuvenating oils conveys significant ramifications in decreasing farming waste and advancing the restorative materials industry. In this review, we planned a cleanser and a body wash item consolidated with lemongrass (*Cymbopogon citratus*) medicinal ointments (LEOs) and assessed their variety soundness and the LEO compositional change. We previously resolved the variety change and synthetic synthesis of exposed LEO under various capacity conditions. A short time later, the washing item base was planned, and its detailing cycle was improved to limit the variety change by shifting many boundaries including pH, the consideration of additives and cell reinforcements, LEO/cell reinforcement proportion, and emulsification temperature. The base item was then utilized in body wash and cleanser detailing following our recently announced method. The outcomes showed that immediate consolidation of the LEO into the corrective items brought about better variety security and citral maintenance in correlation with emulsion development. Furthermore, cleanser and body wash items showed no detectible presence of mixtures coming about because of citral disintegration, for example, 3,7-dimethyl-1,3,6-octatriene, p-mentha-1,5-dien-8-ol, and p-cymene-8-ol. The ongoing discoveries are supposed to support differentiating LEO-inferred wares and legitimizing versatility of the beauty care products creation process with an emphasis on the consolidation of normally determined fixings. Normal cures make lesser side impacts, secure and furthermore acceptable than synthetic ones. On the planet market, details with regular fixings have more accessible. For conveying the medication immediately to the site of activity, which gives delayed activity is the advantages of skin drug conveyance framework. Skin is the primary way of conveyance of medication in TDDS. The fixings are effectively accessible which are being utilized. They are effectively accessible as well as has healthy benefit according to effective perspective and more conservative. To plan and assess the definition is the thought process of this undertaking. It is normal and safe home grown planning which gives quieting, calming and astringent impact on the face. The normal fixings like aloe vera, cucumber additionally the peppermint, lemongrass and rose water utilized in the plan. It having capacity to diminish the facial aggravation as well as to improve excellence. We can involve it in our everyday occupied plan. Face toner is assessed for its physicochemical properties, surface pressure, pH and security. Most well known benefits of home grown beauty care products are, they are non harmful in nature and they having tendency to lessen hypersensitive responses. The fundamental purpose for this review, we tracked down great properties of the face toner.

KEYWORDS :- Toner, Aloe vera, Cucumber, Piper mint, Lemmon grass.

INTRODUCTION

Herbal Cosmetics :-

The natural beauty care products are the arrangements containing phytochemical from an assortment of natural sources, which impacts the elements of skin and furthermore give supplements vital for the sound skin and body.[1] The normal spices and their items or concentrate when utilized for their fragrant worth in superficial readiness are called as natura cosmetics.[2] There has been a typical conviction that the synthetic based beauty care products might be unsafe to the skin and turned in expanded mindfulness among purchasers for home grown items which set off the interest for regular items and normal concentrates in beauty care products preparations.[3]

Beauty care products might be characterized as the substance which is gotten from manufactured and normally occurring synthetic constituents used to keep up with the human body appearance. The skin is safeguarded by the different beauty care products and it keep the skin in great shape. Beauty care

products are the substance which are utilized to improve and decorate the presence of human body. Because of less aftereffects the home grown items having more interest and they are effectively accessible. In these days, in corrective arrangements the utilization of home grown fixing was expanded on the grounds that they are less poisonous and have more successful than manufactured. In nowadays, looking appealing, gorgeous and delightful than unique age, is straightforwardly impacted on the interest of cosmeceuticals on the lookout.

Herbal Face Toner :-

Toner is water based absolutely fluid which contains enthusiastic parts to purify the skin, keeping skin pH stable psychologist pores and award a promptly sparkle. Prior to cleaning up, it eliminates the soil and contaminations which are stuck on pores of skin. When brought to everyday daily practice of skin treatment and utilized routinely, it decidedly affecting the appearance and maturing skin. It has a cell reinforcement property which hydrates the skin. Toner eliminates any last hints of soil; grime and contaminations caught in your skin pores after you clean up. When added to your everyday skincare normal and utilized consistently, it can emphatically affect the appearance and snugness of your pores (maturing skin).[6]

Effects of Toner on Skin :-

Prior the skin toner was a run of the mill item utilized as a second purging specialist for eliminating remaining cosmetics after standard facial purifying or utilized for eliminating abundance sebum emitted from facial skin and to set up the skin prior to sustaining treatment. Toners might be classified into liquor based or non-liquor based toners for different skin types like sleek skin, touchy skin, or blend skin. These days, the variety and commonness of the items make skin toners be used more as cosmeceutical items with a few purposes; for instance, rehydrating skin, adjusting skin pH, fixing skin pores, easing aggravation, and furthermore antiseptics.[6]. In the wake of purging of the face the extra cosmetics was wipe out by the toner, go about as an optional purifying specialist, which plan the skin for nourishment. Alcohol-based and non-liquor based are two class of toner, it is utilized for sleek, touchy and blend kind of skin.

Types Of Toner :-

1. **Skin Freshners Or Bracers** :- It is moderate type of the toner. The toner having water and glycerine (humectant). Humectant saturate the skin surface. Rosewater is its famous illustration. It is generally reasonable for ordinary, got dried out and touchy skin.
2. **Skin Toner** :- Skin tonics are regularly more grounded and having limited quantity of liquor (up to 20%), water and a humectant fixing. Genuine illustration of a skin tonic is orange blossom water. Skin tonics are OK for use on the sleek skin.
3. **Acid Toner** :- These are areas of strength for an of toner that commonly contains alpha hydroxy corrosive or potentially beta hydroxy corrosive. Glycolic, Lactic, and Mandelic acids are the most usually utilized alpha hydroxy acids. The most appropriate to shed the outer layer of the skin. Salicylic corrosive is the most normally involved beta hydroxy corrosive best for peeling into the more profound layers of the skin.
4. **Astringents** :- Astringents are the most grounded type of toner and they contain a high measure of liquor (20-60%), water, sterile fixings and a humectant fixing. These can be harming and aggravating to the skin, because they can eliminate overabundance defensive lipids in the skin, when they utilizes high measure of liquor.

ADVANTAGES OF SKIN TONER :-

Toners dispose of such excess pollutions to supply your face an extra and complete scrub. The presence of pores can limit by customary utilization of the toner. Toners are useful to reestablish the pH equilibrium of the skin. Toner tends to douse rapidly into the skin, providing it with a moment increase in hydration. They are great humectants since they contain substances like glycerin. It implies they help in the retention of dampness through the skin. They set up the skin so it can retain the serums and creams that will be utilized from here on out. Toners can cause your skin to feel in a flash revived. Toners are water-based fluids with quieting and mitigating qualities that can assist with forestalling contaminations and breakouts. They are significant in the counteraction of skin contaminations. A toner adds a layer of security to your skin. It functions as a boundary against soil, residue, contamination, and the sun, among other natural stressors. Toners are comprised of various substances that are utilized to treat an assortment of skin problems. Toners are a shelter for slick or skin inflammation inclined skin.

DISADVANTAGES OF SKIN TONERS :-

Toners containing liquor make the skin become dry and flaky. At the point when utilized in overabundance, it could disturb the skin. For example edema and redness. Toners cause bothering or dryness, whenever utilized in overabundance. Keep away from liquor based toners. Skincare containing liquor is terrible for the skin. It is encouraged to avoid it due to how unforgiving it is. Toners have no specific impediments or secondary effects. In the event that your skin gets dry or disturbed subsequent to utilizing a toner, it is prompted that you ought to change to some other brand. The just thing that you should be stressed over while utilizing a toner is its liquor content. Liquor is generally not terrible for skin except if utilized in high fixations. Be careful about the liquor content of your toner assuming you are utilizing one which is liquor based. If not it can prompt dry and harmed skin. Whenever utilized unreasonably, the results of toner on face can be bothering and skin issues.

METHODS AND MATERIALS :-Fig 1 :- *Cucumissativus***CUCUMBER :-**

Cucumber, *Cucumissativus* (family- Cucurbitaceous).

The silica in cucumber is a fundamental part of sound connective tissue, which incorporates muscles, ligaments, tendons, ligament, and bone. Cucumber juice is in many cases prescribed as a wellspring of silica to work on the composition and wellbeing of the skin, in addition to cucumber's high water content makes it normally hydrating, an unquestionable necessity for sparkling skin.[7] The tissue of cucumber is basically made out of water yet additionally contains ascorbic corrosive (L-ascorbic acid) and caffeic corrosive, the two of which assist with alleviating skin disturbances and diminish enlarging.

MEDICINAL IMPORTANCE :-

Cucumber has heaps of water content to keep skin hydrated. The cooling properties alongside cell reinforcements and silica present in cucumbers assist with restoring the skin. The tissue of the cucumber is for the most part water, yet in addition contains ascorbic corrosive (L-ascorbic acid) and caffeic corrosive, the two of which assist with mitigating skin disturbances and decrease expanding and these acids forestall water maintenance.

ALOE VERA :-Fig 2 :- *Aloe barbadensis***ALOE VERA :-**

The botanical name of Aloe Vera is *Aloe barbadensis* miller. It belongs to Asphodelaceae

(Liliaceae) family, and is a shrubby or arborescent, perennial, xerophytic, succulent, pea-green color plant.[8] Dynamic parts with its properties Aloe Vera contains 75 possibly dynamic constituents: nutrients, proteins, minerals, sugars, lignin, saponins, salicylic acids and amino acids.[8-11].

VITAMINS :-

It contains nutrients A (beta-carotene), C and E, which are cancer prevention agents. It additionally contains vitamin B12, folic corrosive, and choline. Compounds. It contains 8 compounds like monikers, soluble phosphatase, amylase, bradykinase, carboxypeptidase, catalase, cellulase, lipase, and peroxidase. Bradykinase assists with diminishing over the top irritation when applied to the skin topically.

MINERALS :-

It contains 8 compounds like monikers, soluble phosphatase, amylase, bradykinase, carboxypeptidase, catalase, cellulase, lipase, and peroxidase. Bradykinase assists with diminishing unnecessary irritation when applied to the skin topically.

Lemmon Grass :-



Fig 3 :- *Cymbopogon citratus*

LEMMON GRASS :-

Cymbopogon citratus, Stapf (Lemon grass) is a generally involved spice in tropical nations, particularly in Southeast Asia. The natural balm of the plant is utilized in fragrance based treatment.

Lemongrass, additionally called *Cymbopogon citratus*, is a plant that has a place with the family Gramineae or Poaceae. In Greek, 'Cymbopogon' signifies boat-facial hair. It is a fragrant, long-living plant that is local to Sri Lanka and South India. Today, it broadly develops all through Asia and tropical America. Newly cut and somewhat dried lemongrass leaves are utilized to extricate rejuvenating ointments that are additionally utilized for restorative purposes.¹

The normal names of lemongrass are Sera, Verveine in Hindi; Citronella, Squinant in English; Cimbopogone in Italian; Citongrass in Swedish; Sereh in Indonesian; Zacate Limon in Mexican; Sakumau in Malaysia; Tej-sar in Ethiopia; Capim-cidrao, Capim-Santo in Brazil; Citronella.

Pipper Mint :-



Fig 4 :- *Mentha piperita* L

PIPPER MINT :-

Peppermint, botanically known as *Mentha piperita* L. is an aromatic perennial herb, producing creeping stolons and belongs to family Lamiaceae.

The variety name *Mentha* is gotten from the Greek *Mintha*, the name of a legendary fairy who transformed into this plant; and its species name *piperita* is from the Latin flautist, importance pepper, implying its sweet-smelling and impactful taste (Tyler et al., 1988). There are three assortments of *M. piperita* L.: assortment *vulgaris* Sole or Mitcham mint, the most far and wide all through the world; assortment *sylvestris* Sole or Hungarian mint, and assortment *officinalis* Sole. Two assortments of the species, dark mint (which has violet-shaded leaves and stems) and white mint (which has unadulterated green leaves) are under development.

The plant develops from 45 to 80 cm tall, looking like *M. spicata* intently and contrasting in somewhat lengthy petiolated inverse lanceolate leaves and more extensive inflorescence. The stem is quadrangular, directed, purplish, fairly bristly and fanning towards the top. The leaves are inverse, petiolate, praise, forcefully seriate, pointed, smoother on the upper than on the under surface, and of a dull green tone, which is paler underneath.

ROSE WATER :-Fig 5 :- *rosa damascena***ROSE WATER :-**

Rose water is removed by refining flower petals with steam. Rose water is fragrant, and it's occasionally utilized as a gentle normal scent as an option in contrast to compound filled aromas. It's been utilized customarily in both magnificence items and food and drink items. It likewise comes with a lot of potential medical advantages. It has been utilized for millennia, remembering for the Center Ages.[13]

MEDICINAL IMPORTANCE :-

- Anti-Inflammatory Action
- Moisturizing and Anti-Aging Agent.
- Cosmetic & Skin Protection Application.
- Astringent effect on skin pores.
- Skin whitening Agent.

FORMULATION AND PREPARATION :-**Formulation Of Face Toner**

| Name Of Ingredient | Scientific Name | Quantity (50ml) |
|--------------------|-------------------------|-----------------|
| Aloe vera | Aloe barbadensis miller | 1 gm |
| Cucumber | Cucumis sativus | 14ml |
| Pipper Mint | Mentha piperita | 22ml |
| Rose Water | Rosa damascena | 6.6ml |
| Lommon Grass | Cymbopogon Citratus | 2 ml |

PREPARATION :-

1. 44ml of mint and 24ml cucumber juice take in a beaker and stir it.
2. Add the 13.2ml rose water in above mixture.
3. Then add the 4ml of lemon grass and the 2 gm aloe vera gel.
4. Makeup the volume with distilled water and stir the mixture.

EVALUATION OF FACE TONER :-**PH :-**

The 25 mL definition was put in a container with graduations, and the aligned pH meter was put in the definition for a while, and the estimation was taken.

SURFACE TENSION :-

The detailing was moved in the stalagmometer and the surface pressure was recorded.

TEMPRATURE VARIATION :-

The formulation was exposed to different temperatures at 45o C and -10 o C for 3 months to check the stability.

LIGHT EXPOSURE TESTING :-

The product is placed in its actual packaging at direct sunlight/in light chamber for 48hrs to check any discoloration of the product.

SKIN IRRITATION :-

Modest quantity of the fog toner was splashed on left hand dorsal skin and saved for quite a while, result was found non-aggravation on the skin.

STICKINESS :-

The mist particles were not found to be much sticky in nature.

SKIN CONDITIONING :-

The appearance of the skin after application of the mist was seen to be smooth, hydrated and supple.

PHYSICAL EVALUATION OF TONER :-

| Sr. No. | Parameter | Result |
|---------|-------------------|----------------------|
| 1. | Skin irritation | Non-irritable |
| 2. | Skin conditioning | Skin was moisturised |
| 3. | Removable | Easily removable |
| 4. | Stickiness | Not much sticky |

EXTRUDABILITY :-

A basic strategy was taken on for this review. The plan was filled in the folding cylinders after the gel was set in the holder. The extrudability of not entirely settled as far as weight in grams expected to expel a 0.5 cm of lace of gel in 10 second.[24]

DIFFUSION STUDY :-

The dissemination study was completed for the pre-arranged detailing by planning agar supplement mechanism of any fixation. It was filled petri dish an opening exhausted at the middle and gel was set in it. The time taken for the gel to get diffused was noted.[25]

CONCLUSIONS :-

From the above investigations of the definition, obviously the natural gel toner arranged is viable for the smoothening, quieting, astringent, and restoring impact on the skin. It is non crabby and can be involved on everyday bases for improving the regular excellence of human skin.

The definition was additionally found to have huge cancer prevention agent movement which might add to its sunscreen action. Notwithstanding the previously mentioned boundaries the gel toner was found to have great homogeneity alongside great spreadability and pH in the scope of skin. Subsequently, the gel type of home grown toner can be utilized topically for working on the wellbeing and restoration of the dried and fair skin. It was additionally found that the fixings like cucumber and Aloe vera gave the best outcomes for hydration and skin inflammation issues.

It demonstrated that from that review, the natural face toner was arranged is compelling for the smoothening, quieting and astringent impact on the skin. The natural definition enjoy specific benefits like simple application and no any secondary effect and its for the most part preferred. The outcomes from the splash tonner definition were exceptionally good. Every one of the fixings were secured straight from the neighborhood market and they were efficient as well as valuable top. The planned natural face toner has pH in the scope of pH of skin. The fluid type of the natural toner can be utilized topically for the further developing wellbeing and revival of dried skin. It was additionally found that the lemmongrass and mint gave the best outcome for the cancer prevention agent and astringent movement. Result got from assessment investigation of toner are distinct.

REFERENCE:-

1. Vibhavari M Chatur, Sanjay G Walode, Siddhi A Awate, Minal U Gandhi and Vaishnavi S Thorat Formulation and physical characterization of herbal face gel toner World Journal of Advanced Research and Reviews, 2021, 11(01), 138–145
2. Dipanwita Chowdhury, Priyanka Ray*, Abhijit Sengupta Formulation and evaluation of herbal face mist Vol. 7 (1): 14-21, Jan-Mar, 2020.

3. Maharjan H. Radha ,Nampoothiri P. Laxmipriya Evaluation of biological properties and clinical effectiveness of Aloe vera: A systematic review *Journal of Traditional and Complementary Medicine* Volume 5, Issue 1, January 2015, Pags 21-26
4. Chidiebere Ugwu and Stephen Suru Cosmetic, Culinary and Therapeutic Uses of Cucumber (*Cucumis sativus* L.)
5. Gaurav Kumar Sharma, Jayesh Gadhiya, menakshi Dhanawat, Textbook of Cosmetic Formulations.
6. Prajakta N. Dongare, Dr. Ravindra L Bakal, Prashant V. Ajmire, Perna A. Patinge, An Overview on Herbal Cosmetics and Cosmeceuticals.
7. Nida Tabassum Khan* Therapeutic benefits of lemongrass and tea tree.
8. Abidi Safia, Zaidi Aamir, Azhar Iqbal, Sultan Rafi, Mahmood Zafar* Assesment of Rose Water and Evaluation of Antioxidant and Anti-inflammatory Properties of Rose Water Based Cream Formulation *International Journal of Pharmaceutical and Clinical Research* 2019, 11(1); 43-48.
9. Kokate CK, Purohit AP and Gokhale SB. A Textbook of Cosmetics. CBS Publisher and distributor, 2009; 1 st Ed;pp. Page no. 14.52-14.53
10. Amar Surjushe, Resham Vasani, And DG Saple, Aloe Vera: A Short Review *Indian Journal of Dermatology*
11. The Ayurvedic Pharmacopeia of India, part 1, Volume-V, First edition, page no.144-145.
12. Indian Pharmacopoeia, Indian Pharmacopoeial Commission, Gaziabad. Volume-3 Page no. 189, 3238.
13. Zoe Diana Draelos, Lauren A. Thaman Cosmetic Formulation of Skin Care Products. Taylor & Francis Taylor & Francis Group.
14. The Ayurvedic Pharmacopeia of India, part II, Volume-III, First edition, page no.4-5
15. Azhar Danish Khan, Mohammad Niyaz Alam Cosmetics and their associated adverse effects: A review Volume.2, Issue 1, 2019.
16. Thanaroat Timudom, Chaiyavat Chaiyasut, Bhagavathi Sundaram Sivamaruthi, Praty Tiampasook and
17. Duangporn Nacapunchai, Anti-Sebum Efficacy of *Phyllanthus emblica* L. (*Embllica*) Toner on Facial Skin.
18. Mohammed Ali, A textbook of Pharmacognosy (Pharmacognosy and Phytochemistry), Volume-1 Page no. 339-342, 438-440.
19. Larsson SC, Bergkvist L, Näslund I, Rutegård J, Wolk A. Vitamin A, retinol, and carotenoids and the risk of gastric cancer: a prospective cohort study. *Am. J. Clin. Nutr.*, 2007; 85(2): 497–503.
20. Sweet almond [online], Available from: http://www.cosmetics info. org/ingredient_details.php?ingredient_id=403
21. Atherton P. Aloe vera revisited. *Br J Phytother*, 1998; 4: 76–83.
22. Shelton M. Aloe vera, its chemical and therapeutic properties. *Int J Dermatol*, 1991; 30:679–83.
23. Gupta S, Pandit KR. In; Concepts of Pharmaceutical Dosage Form, 9th Edn., B.S. Shah Publication, Delhi, 1997; 155-156.
24. Tripathi KD. In; Essential of Medical Pharmacology, 5th Edn., Jaypee Brothers MedicalPublisher Pvt. Ltd., New Delhi, 2004; 8-16
25. Rajeev Kumar, Sudhir Arora and Shivani Singh³, Formulation and development of herbal cucumber gel for sunscreen and anti-oxidant activities, 5(6): 747-758. Formulation development, optimization and evaluation of aloe vera gel for woundhealing Abdul Wadood Khan, SabnaKotta, Shahid Hussain Ansari,¹ Rakesh KumarSharma,² Amit Kumar,² and Javed Ali^{PMCID: PMC3798142 PMID: 24143047}
26. Ashish Aswal, MohiniKalra, Abhiram Rout. Preparation and evaluation of polyherbalcosmetic cream; *Der Pharmacia Lettre*, 2013; 5(1): 83-88.