



## A Review On Formulation And Evaluation For Herbal Face Serum.

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### □ ABSTRACT

Ageing skin and facial wrinkles are undesirable outcomes of UV rays and photodamage. Serum is a deep formula with a high concentration of active substances, a non-greasy finish, rapid absorption, and the ability to reach deep layers of the skin. The purpose of this study was to use polyherbal extract to make a serum based on these attributes.

A highly concentrated cosmetic product is a face serum containing aloe vera, glycerin, and honeybee venom. Aloe Vera serum has the capacity to penetrate deeper layers of the skin and absorb quickly, providing both immediate cosmetic benefits and psychological gratification.

Aloe vera gel is widely used to treat sunburn, minor wounds, insect bites, wound healing, and a range of skin conditions. It also has anti-inflammatory, anti-fungal, and anti-bacterial properties. Bael fruit extract's anti-inflammatory and antioxidant properties. The physiochemical characteristics, pH, phase separation, and homogeneity of the facial serum were assessed. The results of the stability investigation showed that the phase separation, homogeneity, and physical appearance did not change.

□ KEYWORDS : face serum , aloe vera , polyherbal , evaluation , anti-bacterial .

### ❖ INTRODUCTION

The Greek term “kosmtikos,” which means to have control, arrange, or ability in decorating, is where the word “cosmetics” originated.

Serums are a kind of hydrating skin care product that may penetrate the skin more deeply and release active ingredients. A high-quality face serum may increase moisture levels, minimize pore size, and give your skin a smoother, firmer structure [1]. Antioxidants, chemicals that interact with cells, and skinlike ingredients should be present in every one of these products—moisturizer, anti-wrinkle, anti-aging, or face serum. For every skin type, these elements are essential for the healthiest possible complexion. Gel and liquid preparations are ideal for oily and combination skin; serum and light lotion are ideal for normal to dry skin; and more emollient lotions and moisturizing cream are ideal for extremely dry to very dry skin. Serum is a non-oily skin care product that is perfect for skin. Its active content is highly concentrated, making it one of the best cosmetic items for delivering nourishment to the deepest layer of the skin. The way cosmetic serum absorbed and reached the skin's deeper layers determined its classification.

Advantage of Face Serum :-

- Improve skin texture.
- Minimise the skin pores.
- Hydrate and nourishes the skin.
- Improve skin elasticity.

Disadvantages of Face serum :-

- Not effective for all skin issues.
- Can be Pricey.
- Difficult to select the proper one.
- If not used effectively , it risked being was

#### ❖ METHODOLOGY:

##### 1. Aloev vera : Kingdom : Plantae

Order : Asparagales

Family :Asphodelaceae

Subfamily :Asphodeloideae

Genus : Aloe

Sprcies : Aloe vera

Botanical name : Aloe barbadensis miller •English : India aloe



Fig. Aloev vera

##### 2. Coconut oil :

It contains nourishing fatty acids and linoleic acid which help retain the moisture in the skin and help protect and hydrate your skin



Fig. Coconut oil

### 3. Rose Water:

Rose water is said to be a natural skin toner due to this amazing pH balancing proper



Fig. Rose Water

### 4. Orange Peel :

Orange peels also contain a good amount of flavonoids, phytochemicals, and antioxidants along with an array of nutrients such as calcium, magnesium, and vitamins A, B, and C. It protect the skin from UV rays.



Fig. Orange Peel

### ❖ Composition of Face Serum:

Ingredients	Quantity
Orange peel powder	3gm
Rose Water	4ml
Almond Oil	2ml
Coconut Oil	2ml
Glycerin	4ml
Vitamin E Capsule	2
Demineralized Water	q.s



### ❖ Method Of Preparation :

- Orange peel powder mixed with rose water and filter it .
- Then another beaker Almond oil and Coconut oil mixed properly.
- Prepared a mixture of Glycerin , Aloe vera gel and sufficient quantity water .
- Add all these mixture homogeneously and prepared a face serum .
- Take evaluation parameter of Face Serum

### ❖ EVALUATION OF FACE SERUM

#### 1. Physical Evaluation :

The Colour and appearance of the formulation was observed visually. The formulation procedure uniform distribution of extracts. This test was confirmed by visual appearance and by touch

#### 2. pH- Value :

A pH meter was calibrated using a standard buffer solution. Nearly 1 ml of the face serum was properly weighed and dissolved in 50 ml of distilled water and finally its pH was calculated. The skin has an acidic range and the pH of

The skin serum should be in the range of 4.1-6.7.

#### 3. Determination of Spreadability :

2gm of serum sample was placed on a surface. A slide was attached to a pan to which 20 gm weight was added. The time (seconds) required to separate the upper slide from surface was taken as a measure of Spreadability.

#### 4. Microbial Examination of the Product

In this method, the mixed culture is diluted directly in tubes of liquid agar medium. The medium is maintained in a liquid state at a temperature of 45

### ❖ Applications of Face Serum :

1. A face serum can help to reduce the appearance of fine lines and wrinkles more effectively.
2. Serums make skin more radiant and help in reducing fine lines.
3. Serums is that they reduce inflammation and calm your irritated skin.
4. Irritation is caused by dryness

### ❖ Conclusion :

The study's goal was to create serum that would nourish and make the skin on the face shine . Aloe vera gel and orange peel are the key components of the serum . Aloe vera gel from the inner middle area of the leaf frequently has an excellent effect on acne , pimples, and other skin issues, as well as burns caused by heat and sun exposure and radiation dermatitis . The gel promotes cell development and by itself aids in the healing of damaged skin. The serum eliminates fine lines , wrinkles , dark spots, and further blemishes if paired with appropriate moisturizer and sunscreens . A good pH was discovered . It was simple to wipe out and left no residue behind . The formulation was found to be stable . The report also shows numerous skin care brand a for serums available in the market and a brief description of each product . Microbial examination of serum revealed that the formulation is free from micro-organism and safe for use . So, this serum can be used to treat skin related problems .

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## ❖ REFERENCES :

- 1) Kokate C.K, Purohit AP and Gokhle SB. Pharmacognosy, Nirali publication, edition 50, p 95.
- 2) Urvashi N and Bhardwaj R.L, Aloe vera for human nutrition, health and cosmetic use, International research journal of plant science, 2012; 3(3): 38-46
- 3) S. Ojha, K. Sonkar, M. Pandey, S. Saraf, Aloe vera gel: A potent nutraceutical, Journal of natural pharmaceuticals, 2011; 2(1): 36-39.
- 4) Sujith Varma, A. Fathima, P. Jagannath, M. Akash. IJDFR, 2011;2(5);140-165.
- 5) Smriti Ojha, Surabhi Sinha , Swadhapriya Das Chaudhari, Hina Chadha , Babita Agrawal , Seema Mahor Jain , Ajeet and Meenu , School of Pharmaceutical Sciences , Vishveshaya Group of Institutions , Greater Noida (UP),203207,India .www.wjpr.net ,Vol 8 ,Issue 2, 2019 .Page no.1100to1104.
- 6) M. Itrat, Zarnigar, Aloe vera a review of its research journal of Pharmacy, 2013; 4(8).
- 7) S. Ojha, K. Sonkar, M. Pandey, S. Saraf, Aloe vera gel: A potent nutraceutical, Journal of natural pharmaceuticals, 2011; 2(1): 36-39.
- 8) Agarwal S, Sharma TR, Aloe vera and its therapeutic efficacy, Asian journal of Pharmacy and life science, 2011; 1(2): 195-205.
- 9) Khan Thalha N,Pawar Shankar B,Dapkekar sambhaji A,Shinde Pallavi M,Datkhile Sachin V.Formulation and wvaluation of herbal face serum.
- 10) Somboonwong J., Thanamittramane S.,Jariyapongskul A., Patumraj S. (2000).Therapeutic effects of Aloe vera on cutaneous microcirculation and wound healing in second degree burn model in rats.J Med Assoc Thai. 83(3):417-425.
- 11) Nikhil Nitin Navindgikar, K.A.Kamalapurkar, Prashant S.Chavan.Formulation and evaluation of multipurpose herbal cream.
- 12) Miss.Purva S Rajdev,Prof.Gaikwad S.D, Miss .Akanksha A Somvanshi, Miss.Shubhangi S Gunjal.Formulation and evaluation of face serum.
- 13) MelatiSeptiyanti, Lilis Liana, Sutriningsih, BayuKumayanjati, and YennyMeliana. Formulation and evaluation of from red, brown and green algae extract for anti-aging base material. 2019, 2175(1)
- 14) Gabriella Baki, And Kenneth S. Alexander, Ph.D.: Introduction to Cosmetic Formulation and Technology; The University of Toledo, College of Pharmacy and Pharmaceutical Science; 2-3.
- 15) Shi, V., Tran, K. and Lio, P. (2012). A comparison of physicochemical properties of a selection of modern moisturizers: hydrophilic index and pH. J Drugs Dermatol. 11, 633-636.
- 16) [http://www.skinbiology.com/LevequeandAgache/Ageing skin, properties and functional changes](http://www.skinbiology.com/LevequeandAgache/Ageing%20skin,%20properties%20and%20functional%20changes)
- 17) [https://en.m.wikipedia.org/wiki/olive oil](https://en.m.wikipedia.org/wiki/olive_oil)
- 18) Smriti Ojha, Surabhi Sinha , Swadhapriya Das Chaudhari, Hina Chadha , Babita Agrawal , Seema Mahor Jain, Ajeet and Meenu , School of Pharmaceutical Sciences , Vishveshaya Group of Institutions , Greater Noida (UP),203207,India .www.wjpr.net, Vol 8 ,Issue 2, 2019 .Page no.1100to1104.
- 19) <https://hikoco.co.nz/products/advanced-snail-96-mucin-power-essence>
- 20) <https://actascientific.com/ASNH/pdf/ASNH-05-0821.pdf>
- 21) <https://timesofindia.indiatimes.com/most-searched-products/beauty/skin-care/face-serum-for-glowing-skin-best-ones-to-pick-from/articleshow/97032133.cms34>
- 22) <https://www.slideshare.net/dermaessentia/hyaluronic-acid-serum-174775494>
- 23) <https://www.slideshare.net/HanoorEssenceofHimal/10-uses-of-face-serum-that-definitely-benefits-your-skin>
- 24) <https://www.cerave.com.au/blog/everyday-skin-care/what-is-a-facial-serum>
- 25) <https://www.estelauder.in/product/1799/77491/product-catalog/best-sellers/advanced-night-repair/synchronized-multi-recovery-complex>