



“Formulation And Evaluation Of Herbal Face Serum Enriched With Mulberry”

¹Muskan S. Mansuri ²Prachi P. Parmar ³Shruti Saraf

¹B.Pharm Student, Department of Pharmaceutics, B.Pharmacy College, Rampura, Kakanpur, Godhra, Gujarat, India

²B.Pharm Student, Department of Pharmaceutics, B.Pharmacy College, Rampura, Kakanpur, Godhra, Gujarat, India

³Assistant Professor and Guide, Department of Pharmaceutics Chemistry, B.Pharmacy College, Rampura, Kakanpur, Godhra, Gujarat, India

ABSTRACT:

The formulation of herbal face serum using Mulberry (*Morus Alba*) and Jasmine (*Jasminum sambac*) have investigated in this study. Both are rich in bioactive compound, and offering the benefits such as antioxidant, antiaging and skin lightening properties. Today, Most of serum are available made from synthetic and herbal remedies, but they give sometime unwanted side effects like skin rashes, and allergic reactions. The aim of this research was to develop and evaluate natural, effective and safe face serum. This formulation is evaluated using various physicochemical tests, include pH, Viscosity, Stability, Spreadability. Additionally the serum evaluated for anti microbial activity and skin irritation. Results showed that the herbal face serum exhibited excellent properties and providing effective and natural care for various skin type.

INTRODUCTION:

Cosmetic is a Greek word which means to adorn (addition of something decorative to a person or a thing). Herbal cosmetics are made from various approved cosmetics to form a base, where one or more herbal ingredients are used to obtain certain cosmetics are called as herbal cosmetics. Plant extract are mainly added to cosmetic product due to several related properties such as antioxidant, anti-inflammatory, antiseptic and antimicrobial properties.

A skin care product must be able to deliver the powerful agent into the skin to fulfil the intended objective. Face serum is the answer to deliver the precious active ingredient into the skin thus eliminating the use of hazardous chemicals in giving instant results.

Herbal skin care product have received significant popularity because of their good efficacy and relatively few or no side effects of synthetic drugs. The growing demand for organic and plant based ingredients has led to the formulation of various skin care products, include serum, that are designed to improve skin health. The use of cosmetics show two positive impacts over the influencing nature of customers. It help in increasing the confidence level of every individual and it adds beauty to the physical appearance. Thus, the

demand for using cosmetics is also increased, which leads to the launch of various cosmetics companies in india.

Serum is a concentrated product which is widely used in cosmetology. The cosmetic serum is as concentrated in water or oil as any other cream. Serum are defined as concentrated product that contain ten times more organic matter than cream. Therefore, deals with the cosmetic problem quickly and effectively. Face serum is highly concentrated which is available in water based and oil based.

All the product having anti aging ,anti inflammatory, antioxidant , moisturizing properties and the ingredient used in the serum should have these properties. Skin is the largest and protective organ of the body .Which can sometimes appear under various conditions,such as UV rays ,pollution and make-up ,which have become infected overnight and can cause allergic reactions.

The herbal face serum combining the Mulberry and Jasmine is one such a innovative product Which are the unique properties of both plants to deliver skincare benefits. The aim the formulation of herbal face serum using these two active ingredient is providing natural, rejuvenating solution for various skin including dryness and aging signs.

The formulation process , the selection of suitable concentration and the evaluation method are explored to assess the products effectiveness in promoting health and glowing skin. This work aims to demonstrate the potential of herbal ingredient in developing effective and safe skin care solution.

TYPES OF FACE SERUM:

1. Oil based serum
2. Water based serum
3. Emulsion based serum
4. Gel serum

HOW FACE SERUMS IMPROVE YOUR SKIN:

1. Deep hydration :serum attract moisture to the skin and help to keep it hydrate.
2. Increased collagen production: Serum help collagen production and improve skin elasticity and reduce wrinkles.
3. Skin Repair : It can help repair and strengthen the skin and improve skin texture.
4. Fight Acne: It stop bacterial growth that is cause of acne.
5. Skin brightening: It help brighten the skin and reduce dark spot and uneven skin tone.
6. Fast absorption :Serum are quickly absorb and to penetrate deeper layer of the skin.
7. Minimize the pore size of skin.
8. Reduce the wrinkles and dark circle.
9. Remove the dark circle.
10. It contain anti aging and antioxidant properties.

PLANT INTRODUCTION:**1. MORUS RUBRA:**

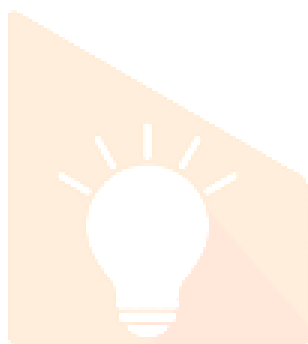
- Kingdom: Plantae
- Order: Rosales
- Family: Moraceae
- Genus: Mulberries
- Botanical Name: Morus Rubra
- Synonyms: Shahtoot, Mulberry, Morus

The Mulberry contain Vitamins ,they are essential for the skincare quercetine and anthocyanins.



Medicinal properties of the Mulberry:

- Rich in antioxidant
- Promote collagen production
- Moisturizing and Hydrating
- Protect against UV damage
- Reduce hyperpigmentation

**2. JASMINUM OFFICINALE**

- Kingdom: Plantae
- Order: Lamiales
- Family: Oleaceae
- Genus: Jasminum
- Botanical Name: Jasminum Officinale
- Synonyms: Jasmine, jessamine, poets jasmine, Summer jasmine

Jasmine have ability to nourish, and hydrate the skin. the plant is n environmental stress and free redical damage.



Medicinal use of Jasminum Officinales:

- Anti inflammatory
- Soothing dry skin
- Relieving acne
- Anti ageing

COLLECTION OF INGREDIENT:

This Mulberry fruit was collected from Hill park society ,at Godhra, Dist - Panchamhal Gujarat ,389001. The Aloe vera was collected from B.Pharmacy College Rampura Kakanpur TA: Godhra State:Gujarat. The Jasmine flowers was collected from B.Pharmacy College ,Rampura Kakanpur, TA:Godhra, State :Gujarat. Jojoba oil, Glycerin, lavender oil are collected from local market of Godhra.

EXTRACTION PROCESSES:

Extraction process of mulberries: Red mulberry are collect and wash them to remove dirt and impurities.



Blend the mulberry and smooth puree use the cheesecloth to separate the juice from pulp.



After filter the juice using fine mesh then collect the active ingredient



Extraction process of Jasmine by Decoction: 10 gram of jasmine flower in 200ml water and stir to prevent sticking to the bottom.



The flower was simmer about 15 min strain the mixture using fine mesh.



More heating for higher concentration until the volume is reduced by half and use in this formulation.



FORMULATION TABLE OF HERBAL FACE SERUM

Ingredients	Quantity
Mulberry extract	2.5 ml
Jasmine extract	2 ml
Aloe vera gel	3.2 ml
Rose water	1.5 ml
Glycerin	3.1 ml
Jjoba oil	1.2 ml
Lavender oil	0.3 ml
Vit –E	0.4 ml

PREPARATION OF HERBAL FACE SERUM TYPES OF FACE SERUM :

1. The emulsion (o/w) was prepared according to formula.
2. The oil phase jojoba oil and lavender oil in mortar Continuous stir for 10 min to obtain a uniform solution.
3. At that same time, the aqueous phase was prepared by equally mixing Aloe Vera gel , Mulberry extract, Jasmine extract , glycerin and rose water.
4. Then half of water phase is separated and then acacia powder is added. Infuse this phase for 10 min.
5. The oil phases is added drop wise to the liquid phase by continuous titration. After each addition the emulsion is called primary emulsion.
6. The remaining aqueous phase is then added in small amount at a time to obtain homogeneous preparation then emulsion is transferred to a cylinder and make up the final volume 20 ml. \

EVALUATION OF HERBAL FACE SERUM:

Sr No.	Evaluation test	Standard value	Result
1	Physical Evaluation Colour Texture Odour	Light brown Smooth homogeneous Floral	Light brown Smooth homogeneous Floral
2	pH	4.1-6.7	4.6
3	Viscosity	1610.7cp at 50 rpm	1670.5 cp at 50 rpm
4	Spreadability	5 to 6 cm	5 cm
5	Washability	Washable	Washable
6	Irritancy	No	No
7	Stability studies Visual appearance Phase separation	Light brown Nil	Light brown Nil
8	Anti- microbial test	and E.Coli are absent	yeus and E.Coli are absent

CONCLUSION:

The face serum are the most important part of the today's modern life as they are used for the beneficial purpose mainly, their demand vigorously. The aim of the study was to prepare an herbal face serum using Mulberry (*Morus Rubra*) , Jasmine, Aloe Vera extract , for Facial Treatment. It is formulated to brighten the skin, Antioxidant effect, Reduce pigmentation , anti ageing .with its 100% herbal ingredients . Jojoba oil has also been added to treat dark spots & wrinkles Glycerin soothes the skin . Formulation was found to be Superior formulation based on pH, Viscosity, homogeneity , irritation and phase separation . Through evaluation we have crafted a serum that is safe , effective and free from harmful ingredients

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