



**PROJECT WORK
ON**

Formulation & Evaluation of Onion Scrub

In the Faculty Of Pharmacy,

Dr. Babasaheb Ambedkar Technological University, Lonere

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Submitted by

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CERTIFICATE

This is to certify that **Asmita Uddhav Bondre PRN.NO.2125551823023** has carried out the required practice school work prescribed by **Dr.Babasaheb Ambedkar Technological University, Lonere** for the VIII semester of B.Pharm. Course during academic year 2024-2025 & this report represents his/her work done under my supervision.

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INTRODUCTION

The demand for herbal cosmetics is high nowadays due to its ability to act as cosmetics and drugs. Skin care products are important factor to improve the confidence in individuals. Women are the larger consumer of skin care products but in the present scenario men are equally concern about their look. This concept about the beauty, look and attractiveness leads to the boom in this field. The cosmeceutical companies produce their product based on the skin texture like men require special type of products due to the roughness of their skin than women. Cosmetics are used universally to enhance beauty and are available in different forms. Various types of skin products are formulated like skin protective, sunscreen, anti-acne, anti-wrinkle for beautifying skin. From ancient era people use herbs for cleansing, beautifying, acne, blackheads, pimples, and dark circles. According to Ayurveda, impurities present in blood are major cause of skin problems.

Skin becomes dull, non-glowing due to various causes and these can effectively be overcome with the application of scrubs. There are two types of scrub being used on the skin such as facial scrub and body scrub. These two are differ only with the ratios of oil and sugar added in each. Use of oil is high in facial scrub due to which it is less abrasive. It removes the dead skin cell and exfoliates the skin. Face scrubs exfoliates and stimulate blood circulation and promotes skin glow by removing dead skin cells and adherent cells in the stratum corneum. Scrub cleanses the skin, removes dirt, remove oil from pores, maintain the elasticity and accelerates the renewal of skin cells.

Herbal Cosmetics, here referred as Items, are formulated, using different permissible cosmetic ingredients to form the base in which one or more herbal ingredients are utilized to supply characterized corrective preferences as it were, might be called as "Herbal Cosmetics" Starting

MATERIALS AND METHODS

All ingredients were obtained in their crude form from a local distributor (Beed.) All the ingredients were powdered and sieved through sieve no.24. The Onion juice is obtained by grinding method. Cut the onion in small slice & grind them in mixer until the juice is form. All powdered ingredients were packed in moisture resistant, well closed containers. The different ingredients and their key uses are enlisted in table no.1.

Formulation of scrub

Table 1: Formulation of herbal scrub

Sr. No.	Ingredients	Quantity
1.	Onion Juice	5 ml
2.	Turmeric	2 gm.
3.	Aloe Vera	2 gm.
4.	Orange Peels	2 gm.
5.	Gram Flour	2 gm.
6.	Multani Mitti	As per Requirement
7.	Khus-Khus	2 gm.
8.	Methyl Paraben	2 ml
9.	Guar Gum	2 gm.
10.	Rose Oil	4-5 drops

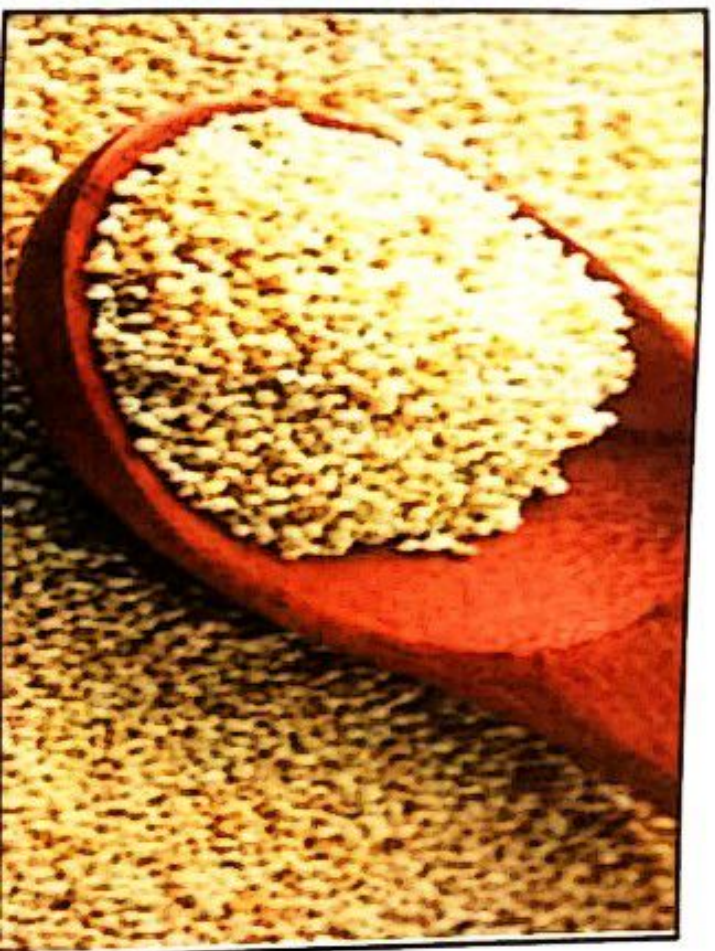


Fig. 4: Turmeric

Turmeric is mainly used to rejuvenate the skin. It delays the signs of aging like wrinkles and also possesses other properties like antibacterial, antiseptic and anti-inflammatory. It is effective in treatment of acne due to its antiseptic and antibacterial properties that fight pimples and provide a glow to your skin. It also reduces the oil secretion by the sebaceous glands. Turmeric widely used condiment and colouring agent. The yellow root Turmeric shows anti-inflammatory property.

KhushKhush

KhushKhush is an oilseed obtained from the poppy flower. Poppy seeds (KhushKhush) have strong anti-inflammatory ability, and thus actively used in Ayurvedic preparations for treating inflammation. This magical seed treats sleep disorders like insomnia. If insomnia occurs due to emotional issues such as anger or distress, these can also be treated with KhushKhush. It scores high on several accounts like dietary fibre, minerals (calcium and iron), vitamins, and omega-6 fatty acids. This herb has medicinal properties and thus used in bath soaps for external application.



IDEAL PROPERTIES OF SCRUB :

- Non toxic
- Possess small gritty particles
- Mild abrasive
- Non irritating
- Non sticky
- Able to remove dead skin cells.

Advantages of scrubbing on skin

- 1) Rejuvenation of the skin- Regular scrubbing causes the elimination of dead skin cells, dirt and impurities from your skin.
- 2) Removes dead skin- Since scrubbing is an exfoliation process, the beads or the granules of the scrub upon cleansing and massaging removes the dead cells of the skin.
- 3) Removes scar- Every ingredient in your scrub formulation has their own property. Therefore, applying scrub rich in vitamin E & C helps in lightening of the scars and dark patches over time.
- 4) Imparts glow to the skin - Dead skin cells impart dullness to your skin. So, scrubbing your face and body regularly gives it a nice glow and adds brightness to it as well.

3. Disadvantages of scrubbing on skin

- 1) Hard scrubbing motions and hard scrubbing chemicals may cause skin irritation including redness, inflammation.
- 2) Over scrubbing can result in open pores which are exposed to pollution and UV rays at the same time.

Why the onion scrub

Herbal medicine has prolonged history of use and better patient tolerance as well as acceptance. Medicinal plants have a renewable source, which is our only hope for sustainable supplies of in- expensive medicines for the world growing population.

Onion face scrub will not only be safe to use but it will also exfoliate your skin, making it look healthier and more glowing. You can buy these instead of chemical ones because Face scrubs that contain natural ingredients have no side effects and are absolutely safe to use. However, you must avoid exfoliating your skin with a face scrub on a daily basis. This is because when the skin gets exfoliated on a daily basis with scrubs, the cells can get damaged and that will result in rough skin. So, you should know how to use it and what things you need to prevent. By using an herbal Face scrub through an exfoliation method, you can stimulate the collagen production on your skin and that will help your skin look smoother and give a radiant look to your skin.

EVALUATION PARAMETER FOR SCRUB

- 1 Colour: Yellowish orange colour of scrub was observed by visual examination
- 2 Odour: Odour found to be aromatic.
- 3 State: Solid state of scrub observed by visually.
- 4 pH: pH of the prepared scrub evaluated by using pH paper. Small amount of scrub applied on pH paper. pH was found in the range of 5.5-6.
- 5 Wash ability: Small quantity of scrub applied on the skin and wash with water. It is easily washable.
- 6 Irritability: Small amount of scrub applied on skin and kept for few minutes and found to be

CONCLUSION

All the ingredients use in this herbal scrub is our food ingredient. So, the chances for its Side effects are less. We can use this herbal scrub for its best result for oily skin. It can also be used dry and normal skin. The efforts are on to reformulate the scrub in a powder base. In order to achieve better stability & spread ability along imparting emollient and smoothing action of the scrub. The prepared scrub was evaluated using various parameters and was found to be satisfied for the application on the skin to make it healthy and glowing without any side effects.

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Table 2: Result of evaluation test of Onion scrub.

Sr. No.	Parameters	Result
1	Colour	Yellowish Orange
2	Odour	Aromatic
3	pH	5.5-6
4	Washability	Easily washable
5	Stability	Stable
6	Grittiness	Small gritty
7	Irritability	No irritation
8	Feel on application	Greasy
9	Removal	Easily removal

Formulation F1, F2, F3 was tested using various evaluation parameters. Spreadability, viscosity and pH of F2 formulation was found very good when compared to F1 and F2. Stability studies of F2 formulation gives good results.

All the ingredients used in this onion facial scrub are our food ingredients. So, the chances for its side effects are less. F2 is more effective than F1 and F3. We can use this herbal facial scrub for getting best results for oily skin. The efforts are on to reformulate the scrub in a gel form in order to achieve better spreadability along imparting emollient and smoothing action.

Methyl paraben

Methyl Paraben is antibacterial since it's a preservative. It is effective at preventing microbial growth and germs such as bacteria and mold in skincare and cosmetic formulations.

Guar gum

With its usage it makes your skin smoother Adding guar gum as an ingredient increases the life of products. It brings natural moisture to the skin. By the usage of guar gum products your scalp and hair is protected by dryness.

Preparation of scrub

- Weigh accurately all the herbal ingredients & sieve through sieve no.24 & mix them together to form a uniform mixture in mortar & pestle.
- Measure accurately Onion juice in another mortar. Weigh Aloe vera then add to mortar. Add methyl paraben & guar gum.
- Mix all herbal powders & triturate them until the proper consistency occurred.
- Add Rose oil for fragrance.



Fig. 6: Multani mitti

Multani mitti helps skin in different ways like minimise pore sizes, removing blackheads and whiteheads, cleansing skin, improving blood circulation, reducing acne and gives a glowing effect to a skin as they contain healthy nutrients. Multani mitti is rich magnesium chloride.



Fig. 6: Gram flour

Gram flour is good for acne-prone skin and can help to lighten any acne scars. It can also be applied all over the body to remove dark spots. It has been used as a base in preparation of herbal scrub.

Orange peels



Fig. 5: Orange peels

Orange is a citrus fruit which contains different nutritional source like vitamin C. It also contain calcium, potassium and magnesium. It prevents the skin from free radical damage, skin hydration and oxidative stress. Also it has instant glow property, prevent acne, wrinkles and aging.

Aloe vera

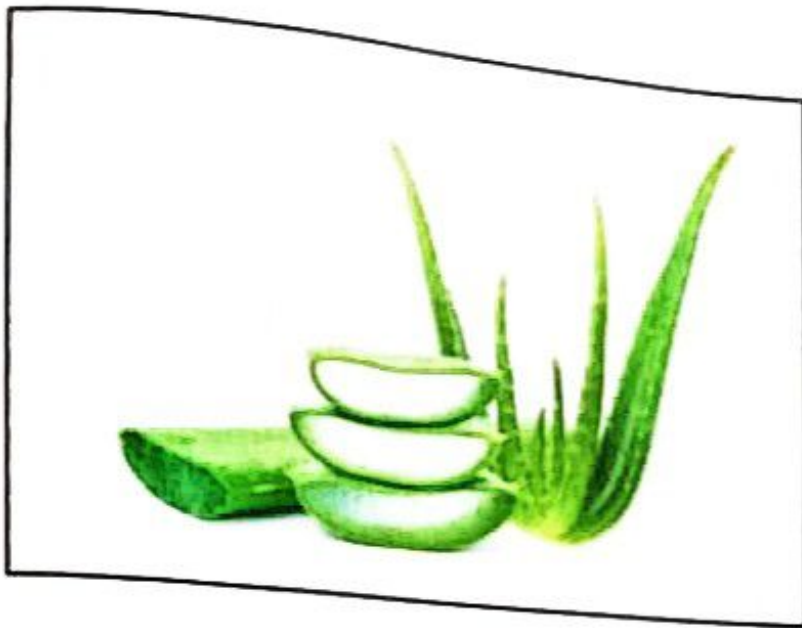


Fig. 3: Aloe vera.

The word aloe Vera means "aloe meaning shining bitter substance while "vera" means true. Aloe Vera contains vitamin A and C and it is also shows anti-inflammatory properties. Aloe Vera belongs to family "Liliaceae and commonly known as Ghritkumari. Aloe Vera used as moisturizing and softening agent on skin. The aloe gel gives cooling effect on skin it has role in rejuvenation of aging skin, Aloe Vera has been used for variety of medicinal purpose. Aloe Vera also be used as a moisturizer.

Benefits of ingredients

Onion

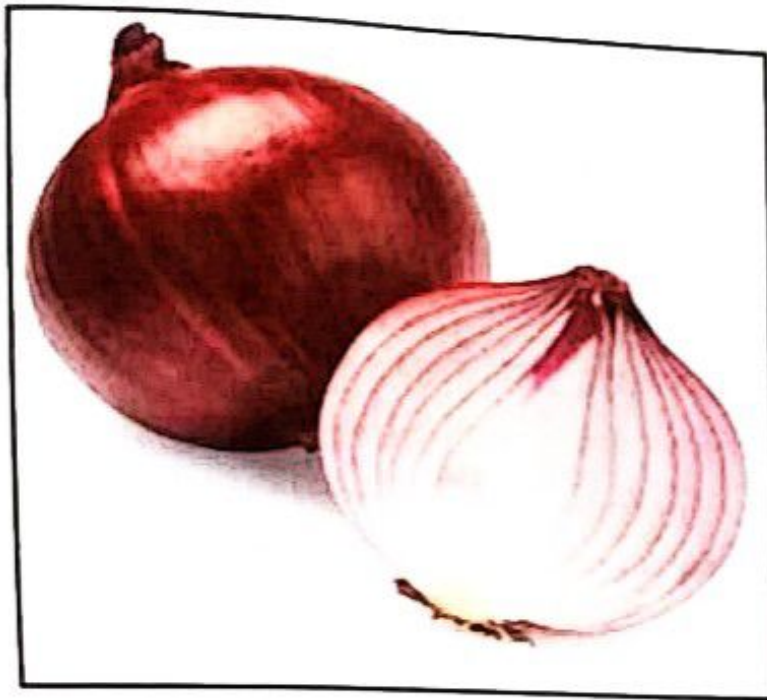


Fig. 2: Onion

It protects from sun. Onion is a great source of flavonoids as well as an antioxidant vitamin such as A, C and E. nourishes the skin. Prevents skin infection.

PLAN OF WORK :

1.Literature Review

2.selection of Drugs & Excipients

3.Method And Preparation

1.material Required

2.methodology

Step 1 Extraction of Onion Juice/Active Compounds

Step 2 Phytochemical Screening

Step 3 Formulation of Serum (SerCB)

Step 4 Evaluation of Formulated Serum

4. evaluation

5. Conclusion

6. Reference

LITERATURE REVIEW :

J. Prathyusha, N. S. Yamani (2019) Cosmetics play a vital role for everyone to have a joyful and sanguine life. In present scenario herbal cosmeceuticals have more demand because they have no side effects. People having oily skin suffer from acne, whiteheads and blackheads quite often so scrubbing become more essential. In our present study we formulated 3 different formulations F1, F2, F3 in gel form for oily skin by using turmeric, aloe vera, cinnamon, potato starch, activated charcoal powder, honey, green tea, lemon juice, onion, walnut shell, coconut oil, beet root juice powder, sodium lauryl sulphate, water and evaluated by using various parameters such as physical appearance, viscosity, pH, Spreadability, irritability, washability, stability studies and got fruitful results with all the tests. The scrub F2 was found to show excellent effects on controlling oil secretion, and preventing formation of new pimples. The herbal formulation F2 was having characteristic odour, reddish brown in color having, light, non-irritant to the skin and quite elegant. The powder was smooth to touch and in gel form it spreads satisfactorily. Thus the formulated scrub F2 can be utilized efficaciously without a side effect which exfoliates and makes glowing skin.

Vidya Keshav Kakad (2022) Many of the marketed products when applied on the skin cause dryness of skin after its long-term use which results less life of skin problems of acne and redness. Solution for this problem is use of scrub which consist all herbal ingredients which increases cleansing, softening, moisturizing, fairness of skin. The use of natural ingredients to fight against acne, wrinkle and also to control secretion of oil is known as natural or herbal cosmetics. Herbal cosmeceuticals usually contain the plant parts which possess antimicrobial, antioxidant and anti-aging properties. Herbal cosmetics are the safest product to use routine with no side effects and cosmaceuticals are the product which influences the biological function

Exfoliation is the process of removal of removing the old, dead skin cells that cling to the skin's outermost surface. The two types of exfoliation are mechanical and chemical. People's opportunities for seeking dermatological assistance for a myriad of conditions, including acne, rosacea, striae, photodamage, and skin cancers have increased in recent years.

AIM & OBJECTIVE :

Aim :

aim of an onion scrub is to cleanse the skin, remove dirt and oil from pores, and promote skin rejuvenation by exfoliating dead skin cells.

Objective :

- To formulate scrub using onion and other herbal products.
- To Predicts shelf life of scrub.
- To prepare scrub using WHO guidelines.

1000's cosmetic manufacturer update a term 'cosmeceuticals' to describe the OTC skincare items that claims therapeutic advantage by addition of plant based active ingredient such as alpha-hydroxy acid, retinoic acid, ascorbic acid and coenzyme. These active ingredients serves numerous purposes viz. increase in skin flexibility, delay in skin aging by decreasing the wrinkles, protection against UV radiation by antioxidant property and to check degradation of collagen respectively.

Onions give flawless skin owing to their rich nutrition profile. It is rich in vitamins such as A, C and E. It also contains antioxidants and minerals to keep skin woes at a bay. SKIN DETOX when applied to the skin, onion scrub remove toxins and gives purified and bright skin.

Here are some onion scrubs are available in market are

