



A REVIEW: “A REIVEW ON FORMULATION POLYHERBAL SCRUB”

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ABSTRACT:

Cosmetic play a vital role for everyone to have a joy 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 different formulation like Wheat cover,Turmeric, khus-khus, Multani mitti ,Ginger ,Coriander, fenugreek, Red Sadal wood ,Sandal wood, Pea seeds, Pumpkin ,Onion, Arjuna ,Neem, Tulsi , Honey , Almond oil ,Sea same oil, Corn mean and Evaluated by various parameter such as Physical Appearance, Viscosity ,pH , Spreadability , Irritability,Washability , Smoothness,complexation and effect on acne ,effect on white and black heads, effect on black spot , Stability, studies and got fruitful result with all tests.To remain healthy and of good apperance the skin surface requires frequent cleaning to remove grin ,sebus and other secretiona dead cells ,crusts and applied make up. In the present work we have formulated the herbal facial scrub by using a different nineteen herbal powder .The scrub shows excellent effects on oily skin and satisfactory effect of normal and dry skin .All the ingredients use in the herbal facial scrub is our food ingredients. So the chances of its side effects are less.The efforts are onto reformulate the scrub in a cream base in order to achieve better Spreadability along imparing emollient and smoothing action of cream. Herbal cosmetics has less or no side effects hence use of herbal cosmetics get increased. Herbal cosmeceuticals usually contain the plant parts which possess antimicrobial , antioxidant and antiaging properties.

Objectives:

The main objective of research study was to formulate an herbal scrub using natural ingredients incorporated into gel. In today's life for both women and men cosmetics plays an important role to beautifying and altering the appearance of skin. The use of natural ingredients to remain healthy and of good appearance, the skin surface requires frequent cleansing to remove oil, sebum and other secretions, dead cells, crusts and applied make-ups. Herbal cosmetic has less or no side effects hence use of herbal cosmetics get increased

Ideal properties of scrub:

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

Precautions to be taken while applying scrub:

- A Scrub is selected based on the skin type
- Excessive Scrub and rubbing can damage the skin
- Do not Scrub skin if any open wounds, cuts, and sunburns present
- Apply twice a week
- Apply with a rotating motion to face and neck for about 30secs.

- Thoroughly rinse with water

1. INTRODUCTION

Herbal face scrub are used to stimulate blood circulation rejuvenates the muscle and help to maintain the elasticity of the skin and remove dirt from skin pores. It is used for the purpose of cleaning, beautifying, promoting attractiveness or alternating one appearance cosmetics are available as various forms and each has its own role to play on the skin . Skin becomes dull ,non glowing due to various causes and these can effectively be overcome with the application of scrubs .The main task of broadly defined scrubbing is the exfoliation of dead epidermis cells ,resulting in skin cleaning and acclerating the cell renewal .Herbal cosmetic are also referred to as natural cosmetic. Herbal cosmetics referred as product are formulated using various permissible cosmetic ingredients to form the base in which one or more herbal ingredients are used to provide defined cosmetics benefits only shall be called as herbal cosmetics. The natural content in the botanical do not cause any side effect on the human body ,instead enrich the body with nutrients and other useful minerals .The natural herbs and their products when used for their aromatic value in cosmetics preparation are termed as herbal cosmetics. From the ancient time different herbs are used for cleaning ,beautifying and to manage them. Face skin is the major part of the body which ingdicates the health of an individual. There are two types of scrub being used on the skin such as facial scrub and body scrub .scrub can be used on any type of skin only the essential oil used in scrub as ingredients will vary with the type of skin.

Skin is classified into three types dry skin ,oily skin , sensitive skin on regular use of scrub ,skin becomes glowing and smoother because use of scrubs .skin becomes glowing and smoother because dead skin cells are remove there by exposing new skin cells .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 were thought to be the larger consumer of skin care products but in the present Scenario men are equally concern about their look.[1] This concept about the beauty, look and Attractiveness leads to the boom in this field. The cosmeceuticals 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.[2] The health of an individual is mainly represented by the skin which is the major part of the Body. Lipids, amino acids, carbohydrates are the composition of skin. Skin can be affected by

Why a scrub?

In a nutshell ,lipids are skin's natural fats .They are essential components of skin and play a crucial role in maintaining the strength of the skins protective barrier which holds moisture, protects the skin from damage and keeps dirt and impurities out .The epidermal lipids of keratinocyte origin play an essential role in the skins barrier function. These lipids provide a barrier against the movement of water and electrolytes as well as barrier against microorganism's invasion. The epidermis has a very active synthesis of cholesterol,fatty acids and ceramides .



Before Scrub Applied After

Herbal	Allopathy
<p>1) Holistic healing science comprises of two words Ayu and veda .Ayu means life and veda means knowledge or science. So the literal meaning of the word Ayurveda is the science of life. Ayurveda is a science dealing not only with treatment of some disease but is complete way of life</p>	<p>1) System of medical practice, treatment disease by the use of remedies which produce effects different from those produced by the disease under treatment.</p>
<p>2) Ayurveda aims at making a happy ,healthy and peaceful society.The two most important aims of Ayurveda are a) to maintain the health of healthy people b) to cure the disease of sick people</p>	<p>2) The term ‘allopathy’ was coined in 1842 by C.F.S Hahnemann to designate the usual practice of medicine as opposed to homeopathy,the system of therapy that he founded based on the concept that disease can be treatment with drugs through capable of producing the same symptoms in healthy people as the disease itself</p>

Benefits of scrubbing on skin

For A Squeaky Clean Skin:

Scrubbing gives you clean skin, free from dirt, oil, and sweat. Actually, the bottles of cleansing Milk, face wash and facial cleansers cannot pull out all the dust that accumulates in the pores Of your skin. Scrubbing does this job successfully.

1. Frees Your Skin From Flakes:

Flaky skin gives rise to dry patches. It allows dead cells accumulate over time. Scrubbing your Skin can help you deal with flaky skin effectively.

2. Helps In Removing Dead Cells:

Dead cells make your skin look dull and tired. Scrub them off with a gentle scrub.

3. Adds Glow To Skin:

Exfoliation can actually make your skin glow.

4. Removes Dark Patches:

Use of scrub twice a week to get results. It is especially effective on knuckles, elbows and Knees.

5. Removes Acne Scars:

Exfoliation helps in doing away with acne scars.

6. Prevents Ingrown Hair:

Ingrown hair is a perennial problem and scrubbing is the solution to prevent this problem.

7. For Smooth Skin:

Smooth skin is the key to a more beautiful you. The scrub will not only make your skin look flawlessly smooth, but will also make it soft and well-nourished.

8. Improves The Texture Of Your Skin:

Scrubbing your skin gives you clean and smooth skin with an improved texture

Advantages:

1. Rejuvenation of the skin

Regular scrubbing causes the elimination of dead skin cells, dirt and impurities from your skin. Your skin feels rejuvenated and fresh as it also unclogs your pore.

2. Deals with flaky skin

Flaky skin arises as a result of deposition of dead skin cells and also imparts dry patches over time. So, scrubbing will also help you to get rid of the flaky skin.

3. 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. Removal of the dead skin assists in repair of the skin as well.

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.

5. 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.

Disadvantages:

1. Hard scrubbing motions and hard scrubbing chemicals may cause skin irritation including redness, inflammation. If you have a sensitive skin one can also have allergic reactions to the chemicals present in the synthetic scrubs as well.

2. Over scrubbing can result in open pores which are exposed to pollution and UV rays at the same time. It also leaves your skin more prone to infections and tanning

Content : 1)Formulation and evaluation of herbal face scrub

No.	Name of Ingredients	Quantity in Percentage	Use
1	Wheat cover	0.5 %	It removes dead skin, astringent and protective
2	Turmeric	1.0%	Antiseptic and improves Fairness
3	Khus-khus	1.0%	Removes heat
4	Multani Mitti	1.0%	Cleaning of oil and dust particles
5	Ginger	0.5%	Promote circulation
6	Coriander	0.5%	Cooling effects
7	Fenugreek	1.0%	Prevention of acne
8	Red sandalwood	1.0%	Post acne and other facial scars
9	Sandalwood	1.0%	Smoothing, cooling effect and improves fairness
10	Pea seeds	0.5%	Prevention of acne
11	Pumpkin	0.5%	Juvenile acne and acne vulgarize, pimples, blackheads, antiseborrhoea agent.
12	Onion	0.5%	Acne, blackheads, for blemished skin.
13	Arjuna	0.5%	Skin disease, astringent
14	Neem	0.5%	Many skin conditions, antiseptic.
15	Tulsi	0.5%	Acne, antimicrobial
16	Honey	1.0%	Emollient, antiseptic and astringent, nutritive
17	Almond oil	1.0%	Nutritive and emollient
18	Sesame oil	1.0%	Skin tonic and emollient
19	Corn meal	1.0%	Astringent, removes dead skin

INGREDIENTS:**Wheat cover:**

It works wonder to enhance skin fairness. Wheat flour also help a great deal in skin exfoliation and removal of dead in skin cells . It help in making the skin glow and the major advantage of wheat is that it works equally on skin types be it sensitive , dry ,oily , combination skin . It helps in restoring the skin cells and thus rejuvenating the skin

**Ginger:**

It is high in antioxidants making it a great resource for anti-aging. It soothes burns ,clears acne and blemishes and heals inflammation .During the warmer months ,scrub away excess dirt ,oil and impart a smooth surface for an even glowing tan.

**Coriander:**

Acts an excellent exfoliator .It is a great skin exfoliator. Smoothness' , Rashes and sunburns coriander has a abundance of antioxidants, skin friendly minerals and vitamin C . Reduces fine lines and wrinkles , glowing skin .

**Fenugreek:**

Glowing skin ,the presence of vitamin C in fenugreek seeds lightens the skin complexion and gives it a beautiful glow. Cleanses ,skin ,facial toner, exfoliates skin ,mosturizers skin . Reduces blemishes and dark circles , anti-aging properties, cure acne.

**Red sandal wood:**

It is primarily used for skin care and beauty purposes . It is very effective in treating blemishes ,rashes and acne. It also helps in the removal of tan and dullness.

**Sandalwood :**

Sandal wood powder helps in fighting acne causing bacteria ,exfoliates the skin ,soothes sunburn removes sun tan ,and also cooling effect .

**Pumpkin :**

Pumpkin contains vit A,C and E and antioxidants .which help fight sun damage and wrinkles . It also has fruit enzymes that help naturally exfoliate dead skin cells .finally it contains zinc and potassium to combact redness.

**Onion:**

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

**Arjuna:**

It has good antioxidant property that prevents skin damage caused by these free radicals. It helps in formation of new skin cells hydrates the skin and improves skin elasticity.

**Neem:**

It contains antibacterial and antioxidant properties which infiltrate into the skin and gets rid of all the dirt and germs.



Tulsi :

It is helpful for removing blackheads, removes microbes and pollutants effective ,removes dull and dead skin cells . It has no side effect .



Honey:

It is one of t nature most reserved skin remedies. Honey is also a natural humectants so it help keep the skin moist but not oily .



Preparation of scrub:

Weighted quantity of each ingredient was taken. Turmeric, ginger, coriander, fenugreek, pea

Seed, pumpkin, onion, khus-khus were taken and mixed thoroughly in a motor and then other Ingredient like wheat cover, arround, neem, tulsi powder, corn meal were taken in a another Mortar and mixed properly. The two powders were mixed well together and all other

Remaining ingredients were gradually added with good mixing. Add drop by drop sesame oil And almond oil and mix properly taking care to avoid lump formation. Finally add glycerin Drop by drop mixed thoroughly in a mortar. Final product was packed in well closed plastic Bags each containing 20 gram The formulation prepared was used as the following way:

As Cleanser

Mix the formulated powder with specified quantity of water, in a clean bowl, until a smooth Paste is resulted. Gently swirl over and massage onto damp skin with fingertips, rinse off With warm water.

As Mini Mask:

Apply a thin layer to face, avoiding eye area, and leave on 2-3 minutes, rinse thoroughly pat Dry.

Evaluation of Herbal Facial Scrub

Eight volunteers were selected in each group of age group of 16-22. Volunteers were grouped In 4 groups based on skin type.

Group 1:- comprised of individuals with normal skin and served as the control group. They Were provided with the popularly used EverYuth facial scrub marketed by Zydus Cadila.

Group 2:- Comprised of individuals with normal skin and they were provided with prepared Facial scrub.

Group 3:- Comprised of individuals with dry skin and they were provided with the prepared Facial scrub.

Group 4:- Comprised of individuals with oily and acne prone skin and they were provided With prepared facial scrub. All the volunteers were asked to use the scrub three times in a week by first making a paste And then gently rubbing on the face in upward circular movements. They were asked to wash The face with cold water after keeping it on for two minutes

Table no.2 Subject Evaluation

Particulars	Control group	Normal skin		Dry skin		Oily skin	
Appearance	+ - +	+++	++-	++-	++-	++-	++++
Smoothness	+ - +	++-	-+-	--+	++-	++-	++-
Complexation	+ - +	++-	-+-	-+-	++-	++-	++-
Effect on acne	- - -	-+-	-+-	--+	-+-	-+-	++++
Effect on white and black heads	+ - +	+++	+++	- - -	- - +	- + +	++++
Effect on black spot	- - -	+++	++ +	- +	++	+ - -	- - +
Spreadibility	+ - +	++-	-+-	+ - -	- - -	- + +	++++
Astringent action	- - +	+++	+ - -	+ + -	+ - -	- + +	++++
Emollient action	+ - +	+++	- + +	+ + -	++-	- + +	++++
Irritation	- - -	- - -	- - -	+ - -	- - -	- - -	- + +

Excellent: +++++, Better: +++, Good: ++-, Satisfactory: +.

The herbal facial scrub prepared in the laboratory was found to be comparable to the Popularly used marketed scrub with respect to several parameters. The scrub was found to Show excellent effects on controlling oil secretion, and prevented formation of new pimples. This effect might have been due to multani and Arjuna incorporated in the formulation The powder formulation was brown in color having khus fragrance, light, non-irritant to the Skin and quit elegant. The powder was smooth to touch and in paste form it spreads Sufficiently. The scrub provided strong abrasive action due to the presence of wheat cover and corn meal and this helped to remove the dead cells and skin debris giving the face a fresher look. A soft, smooth feel. The effect on black and white heads was found to be satisfactory. This Effect might have been due to onion[5, 8] and pumpkin[5,13]. Improved in the complexion was Observed due to presence of curcumin (Turmeric) in the scrub which decreases the melanin Synthesis.

The subjects with oily skin reported reduced levels of oil secretion of the face. This effect Might have been due to the astringent effect of arjuna (Tannins), multani and honey Incorporated in the scrub. The Group with dry skin observed less dryness in the skin with Regular use of the scrub. This effect may have been due to honey and almond oil added to The mixture. The effect on black spots on normal skin was found to be better and might be Due to red sandalwood[7]. Therefore, it can be concluded that the scrub prepared by us, served As a suitable and beneficial alternative to the more expensive marketed scrub. The results are Shown in table no-2

How to use herbal face scrub?

Using a facial scrub can make your skin feel beautiful, youthful, soft, and like it's glowing. Unlike a regular soap or cleanser, a facial scrub uses small particles, beads, or chemicals to get rid of the old skin cells and make way for new ones in a process known as exfoliation.[1] The process is simple: to use a facial scrub, choose a natural or chemical scrub suited for your skin type, massage the scrub into damp skin for one minute, then rinse and

moisturize your skin. Repeat once or twice a week. With all of its benefits, you should consider making a facial scrub a part of your weekly skin care routine

2) formulation and evaluation of herbal face scrub

Sr.No.	Common Name	Category	Quantity (%)
1	Green apple	Anti aging, anti oxidant	2
2	Cinnamon	Antibacterial	2
3	Millet	Improves complexion	3
4	Honey	Antiseptic, Antioxidant	4
5	Sandalwood	Smoothing, cooling effect and improves fairness	1
6	Neem	skin conditioner, antiseptic.	0.5
7	Turmeric	Antiseptic and improves Fairness	0.5
8	Carbopol	Gelling agent	2
9	Methyl Paraben	Preservative	0.1
10	Triethanolamine	Neutraliser	2
11	Propylene Glycol	Moisturiser	2
12	Sodium Lauryl Sulfate	Foaming agent	4
13	Distilled water	Vehicle	Q.S.

Preparation of extract:

The extract Was prepared by cold maceration process⁶. Green apple, Cinnamon, Millet, Sandalwood, Neem, Turmeric were ground and kept with water for 72hrs. This was dried and stored in desiccator further use.

Preparation of gel:

Methyl paraben was weighed and dissolved in a beaker containing water. To this carbopol was added and stirred continuously for few minutes until it forms a gel. Sodium lauryl sulfate was weighed, dissolved separately with water and was added into the above gel. Followed by this propylene glycol was added. Drop wise triethanolamine added into gel to neutralise the pH. The active ingredient mixture was then added into the prepared gel and stirred.

Evaluation Parameters :

SR.NO.	PARAMETERS	OBSERVATION
1	colour	Brown
2	Odour	Characteristic
3	Consistency	Good
4	pH	7.0
5	Viscosity	1.4580 poise
6	Spreadability	6.72g.cm/sec
7	Washability	Easily washable
8	Grittiness	Small gritty particles
9	Foam ability	Foam volume 100ml at 5 minutes
10	Irritability	Non irritant
11	Extrudability	Easily extruded

The prepared gel was evaluated for appearance, pH, consistency, Spreadability, tradability, viscosity, irritability, washability, grittiness, foam ability

2. RESULTS AND DISCUSSION

Appearance:

The prepared scrub gel was evaluated for its odour and colour. The colour was found to be brown in colour and odour was found to be characteristic pH of the prepared gel was evaluated. Small amount of the gel was applied on the pH paper and found to be

Consistency :

It was found to be semi solid with visual observation.

Spread ability :

Small amount of the gel was placed on the glass slide and another glass slide was placed on the gel. A wooden weight was placed on it .The time required for the gel to spread and the area was measured. The amount and the area of gel on the glass slide represents the efficiency of spreadability.

Extrudability

Small amount of gel was taken into a collapsible ointment tube. One end closed and the other end kept opened. Slight pressure was applied on the closed side. The time taken to extrude and the amount of gel extruded wasp readability

Viscosity:

Brookfield viscometer was used to measure the viscosity of gel.

Irritability:

Small amount of the gel was applied on the skin and kept for few minutes and found to be non irritant.

Wash ability

Little quantity of gel was applied over the skin and was washed with water. It was easily washable. Grittiness Gel was found to have a few gritty particles.

Grittiness:

Gel was found to have a few gritty particles.

Foam ability:

Small amount of gel was shaken with water in a graduated measuring cylinder and foam was measured

3) Formulation and evaluation of herbal face scrub

Table 1: List of ingredients used for formulation

S. No	Name of the ingredient	Uses
1.	Turmeric	Used as an Antibacterial, antifungal and brings glow to the skin.
2.	Aloe-vera	Moisturizing agent and delivers smoothing property to the skin.
3.	Cinnamon	Anti-inflammatory property, Removes acne, scars and wrinkles.
4.	Potato starch	Natural scrubber, skin lightening agent, gelling agent.
5.	Activated charcoal powder	Activated charcoal removes dirt, chemicals, bacteria, poisons, and other micro-particles from the surface of skin, brings flawless complexion and clears acne.
6.	Honey	Used as humectants and as nutrient, used as thickening agent.
7.	Green tea	Polyphenols containing green tea helps in anti ageing, skin looks younger and attractive.
8.	Lemon	The high content of Vitamin C in lemon will help to lighten the skin tone and remove dark spots which were caused by skin tan.
9.	Onion	Acne, blackheads for blemished skin.
10.	Walnut shell	Exfoliator that gently removes impurities and dull cells leaving skin instantly smooth and radiant
11.	Coconut oil	Nutrient, Skin tonic and emollient.
12.	Beet root juice powder	It is used as a coloring agent. It also gives healthy and glowing skin.
13.	Sodium lauryl sulphate	Surfactant used as a cleaning and foaming agent
14.	Water	Solvent

3. MATERIALS AND METHODS

Materials:

All the ingredients were powdered and sieved through Sieve no. 120. Then they were packed in moisture Resistant, well closed containers. The different Ingredients with their key uses are enlisted in table 1. Preparation of extract

The extract was prepared by cold maceration process. All the active ingredients (turmeric, cinnamon, aloeVera, activated charcoal, honey, green tea, lemon juice, Onion, coconut oil) were ground and kept in water for 72 hours. This was dried and kept in desiccator for Further process.

Preparation of gel:

Sodium lauryl sulphate was weighed and dissolved in Water and this solution is added to the potato starch which is used as a gelling agent. To this add the above prepared extract and stirred it for 5 min. Walnut shell microbeads added to this mixture which gives grittiness to the gel.

Table 2: Composition of developed formulation.

S. No	Ingredients	Quantity taken for 10 g gel		
		F1	F2	F3
1.	Turmeric	0.5 g	0.5 g	0.5 g
2.	Aloe vera	0.7 ml	0.7 ml	0.6 ml
3.	Cinnamon	0.01 g	0.01 g	0.01 g
4.	Potato starch	0.5 g	0.75 g	0.25 g
5.	Activated Charcoal	0.2 g	0.2 g	0.3 g
6.	Honey	3 ml	4 ml	3 ml
7.	Green tea	0.2 g	0.1 g	0.1 g
8.	Lemon	0.7 ml	0.8 ml	0.7 ml
9.	Onion	0.01 ml	0.01 ml	0.01 ml
10.	Walnut shell	0.5 g	0.5 g	0.5 g
11.	Coconut oil	0.2 ml	0.2 ml	0.2 ml
12.	Beet root juice powder	0.2 ml	0.2 ml	0.2 ml
13.	Sodium lauryl sulphate	0.01 g	0.01 g	0.01 g
14.	Water	q.s	q.s	q.s

Evaluation Color:

The color of the face wash gel was checked Visually. Odour: The formulation was Evaluated for its odour by Smelling it. pH: 1% solution of our sample was measured by using a digital pH meter at constant temperature.

Consistency: It was tested manually.

Spread ability:

Two slides are taken and herbal sample Was placed on one slide. Other slide was placed on the First slide. 100 g of weight was kept on the slides so that It spreads as a thin layer. Weight was been eliminated Much high than the prisons. Next weight of 20 g was Kept on the upper slide. It was performed for 3 times And average was calculated. Spread ability was calculated by using the following

Formula, $S = M \times L / T$

Where, S- Spread ability; M- Weight tied to the upper Slide (20 g); Length of the glass (6.5 cm); Time in sec.

Viscosity:

Brookfield viscometer was used to measure The viscosity of our sample. Viscosity of sample and Water were taken in poise.

Wash ability:

Formulations when applied on the skin Can be easily removed by washing with water were Tested manually.

Grittiness:

The product was checked for the presence Of any gritty particles by applying it on the skin Foamability:

Small amount of gel was taken in a beaker Containing water. Initial volume was noted; beaker was Shaken for 10 times and noted the final volume.

Grittiness: The formulation was checked for the Presence of any gritty particles by applying it on the Skin.

Patch test:

Patch testing is well established method for Diagnosing the hypersensitivity as well as to determine

The potential of a specific substance to cause the allergic Action on patient skin. In patch test a small area of skin Is exposed to those chemicals in dilute form whose Specific effect on skin is to be studied. In patch test Reaction of formulation on skin is observed in 2-3 days. Stability studies [10]: the stability of the formulation Was tested by filling the scrub in plastic containers and Placing it in humidity chamber at 45°C and 75% Relative humidity. The stability of the formulation was Inspected for 3 months at interval of one month each

Table 3: Evaluation parameters for polyherbal facial scrub

S. No	Parameters	Observation		
		F1	F2	F3
1.	Colour	Reddish brown	Reddish brown	Reddish brown
2.	Odour	Characteristic	Characteristic	Characteristic
3.	pH	6.0	5.8	6.2
4.	Consistency	Semi-solid	Semi-solid	Semi-solid
5.	Spreadability	4.8 g-cm/sec	5.6 g-cm/sec	4.1 g-cm/sec
6.	Viscosity	1.4 poise	1.7 poise	1.2 poise
7.	Washability	Good	Easily washable	Good
8.	Grittiness	No	No	No
9.	Foamability	150 ml	150 ml	150 ml
10.	Patch test	no allergic action	no allergic action	no allergic action

4. RESULTS AND DISCUSSION

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: stability studies of F2 formulation gives good results during 3 months and the values are below

Table 4: Results for stability studies of F2 formulation

Parameter	Initial	1 st month	2 nd month	3 rd month
Colour	Reddish brown	Reddish brown	Reddish brown	Reddish brown
Odour	characteristic	characteristic	characteristic	characteristic
Spreadability	5.6 g-cm/sec	5.5 g-cm/sec	5.4 g-cm/sec	5.4 g-cm/sec
pH	5.8	5.7	5.6	5.5
Viscosity	1.7 poise	1.6 poise	1.58 poise	1.56 poise

All the ingredients used in this poly herbal 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

5. CONCLUSION

All the ingredients use in this herbal facial scrub is our food ingredient. So, the chances for its Side effects are less. We can use this herbal facial 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 cream base In order to achieve better Spread ability along imparting emollient and smoothing action of the Cream. The prepared scrub gel 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.

Herbal ingredients opened the way to formulate cosmetic without harmful effects which can impart the required properties to heal skin disease and the expense will be when compared with the synthetic products.

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Expected Outcomes:

- To know different Ingredients in herbal scrub formulation.
- To understand different methods for formulation of herbal scrub.
- To get knowledge of different evaluation methods.
- To understand various parameter have been evaluated providing satisfactory result and improve the apperance of skin without any side effects.

6. MAPPING WITH POS

Program Outcomes:

- | | |
|--------------------------|-------------------------------------|
| PO 1: Pharmacy Knowledge | PO 6: Professional identity |
| PO 2: Planning Abilities | PO7: Pharmacist ethics |
| PO 3: Problem Analysis | PO 8: Communication |
| PO 4: Modern tool usage | PO 9: Pharmacist & society |
| PO 5: Leadership skills | PO 10: Environment & sustainability |
| | PO 11: Lifelong learning |

Example

