



FORMULATION AND EVALUATION OF A HERBAL FACIAL SCRUB.

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ABSTRACT

To remain healthy and of good appearance, the skin surface requires frequent cleansing to remove grin, sebus and other secretions, dead cells, crusts and applied make-ups. In the present work we have formulated the herbal facial scrub by using a different nineteen herbal powders such as turmeric, neem, sandalwood, arjuna, pumpkin, almond oil, sesame oil etc. The scrub was evaluated by using the parameters like Appearance, Smoothness Complexation and effect on acne, Effect on white and black heads, Effect on black spot, Spreadability, Astringent action, Emollient action and Irritation. The scrub shows excellent effects on oily skin, and satisfactory effects of normal and dry skin. All the ingredients use in this herbal facial scrub

is of our food ingredient. So, the chances for its side effects are less. The efforts are on to reformulate the scrub in a cream base in order to achieve better Spreadability along imparting emollient and smoothing action of the cream.

Keywords: Facial scrub, turmeric, sandalwood, Black heads, Spreadability, Emollient action, etc.

MATERIALS AND METHODS

All ingredients were obtained in their crude form from a local distributor (Dgadu teli chandwadkar, Nashik.). All the ingredients were powdered and sieved through sieve no. 120. All powdered ingredients were packed in moisture resistant, well closed containers. The different ingredients and their key uses are enlisted in table no.1.

Table No. 1. Formulation of Herbal facial scrub

Sr. 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

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, arjuna, 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 grams.

The formulation prepared was used as the following way:

As Cleanser

Mix the formulated powder with spec iced 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 porn 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.

RESULTS AND DISCUSSION

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 quite 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^[12] and this helped to remove the dead cells and skin debris giving the face a fresher look and 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 complexation 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)^[7, 13] multani and honey^[5] 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^[6, 7] 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

Table no.2 Subject Evaluation

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

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

CONCLUSION

All the ingredients used 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 spreadability along imparting emollient and smoothing action of the cream.

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