

Formulation & evaluation of poly-herbal scrub by using onion juice (*Allium Cepa* L.): A research

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Abstract

The main purpose of the present study was to formulate a onion scrub with the integration of *Allium Cepa* l. (Onion) as the main active drug. Cosmetic have important part in the everyday life for both men and women to show a happy and sure life. This onion scrub have the antiseptic, antioxidant and Anti-inflammation properties. In this project work we have formulated the onion scrub by using a different herbal ingredients such as orange peels, cucumber powder, Aloe Vera, rice flour, onion juice etc. The evaluation parameters of the onion scrub such as Appearance (Colour, odour) smoothness and effect of acne, effect on white and black heads, spreadibility, irrigation. The onion scrub shows the outstanding effect on oily skin, and acceptable effect of normal and dry skin. All the ingredients used herbal scrub, So less chances to any side effects. The aim of this project is face onion scrub for glowing, antioxidant activity on skin.

Keywords: antioxidant property, onion juice, anti-inflammatory properties, antiseptic properties, cucumber

Introduction

Onion are the member of the *Allium* plant of the biological sources *Allium Cepa* linn. from Latin *Cepa* a Means onion also known as the bulb onion or common onion. It is vegetable most widely cultivated species of genus *Allium*. The odour of onion are pungency due to the various sulphur compound. Onion scrub is the cosmetic products which cleanses the skin of the face. The human skin are divided into the three types: Dry skin, oily skin and sensitive skin. Some people have dry skin they must be used onion scrub which contains moisture is must for them after using scrub. Skin care products are very important factor to improve assured in individuals. Women are the highly quantity of used the skin care products. Onion (*Allium Cepa*) is a plant that is grown all world. The onion extract used to the making medicine. The properties of onion are reduced swelling and asthma related problems. They also reduce cholesterol and lower blood sugar.

Cosmetic are used applied both the man and women body for the purpose of beauty, cleaning, promoting attractiveness or altering, the appearance various types of skin products used like skin protection, sunscreen, anti-wrinkle for pretty skin. Some people used herbal ingredients for cleaning, beautifying, Acne, black heads, white heads, pimple and dark circles. According to the Ayurveda, contamination present in blood are causing of skin problem.

On skin of removal of dead cells on the surface of skin, non-glowing are various causes on skin. In this condition scrub also used. Scrub are used two types such as facial scrub and body scrub. These two are different only with ratio of oil and sugar added in each. The oil used in facial scrub due to less abrasive. They removes the dead skin cell. Onion scrub used to the cleaning, the skin removes dirt, remove oil from pores, maintain the elasticity.

Benefits of Onion Scrub

- Can reduce surgical scars and soften skin
- Can soften and brighten skin
- Can fight off bacteria that cause inflammation
- Helps fight off viruses and fungi

Table 1: Classification of *Allium Cepa* linn.

Kingdom	Plantae
Class	Monocotyledonae
Order	Asparagales
Family	Amaryllidaceae
Subfamily	Allioideae
Genus	<i>Allium</i>
Species	<i>A.Cepa</i>
Binomial name	<i>Allium Cepa</i> linn.
Common name	Common onion, bulb onion



Fig 1: Onion plant Description

Onion (*Allium Cepa*), herbaceous biennial plant in the amaryllis family (Amaryllidaceae) grown for edible bulb. The origin of onion are southwestern Asia but now grown all over world. The onion grown cultivation for at least 7000 years. Onion grow to a height of 15 to 45 cm (6 to 18 in).



Fig 2

Biological compound present in onion

1. commonly allicin, quercetin, other sulphurous compounds: diallyl disulphide and diallyl trisulphide
2. onion contains various flavonoids, ascorbic acids etc

Table 2

Onion properties	Maintain for your skin
Antioxidant	Can reduce surgical scars
Phytochemicals	Can soften and brighten skin
Antibacterial	Can flight off bacteria that cause inflammation
Antiseptic	Helps fight off virus and fungi

Important of ingredients

1. **Onion juice:** Onion protect from sun. They have great flavonoids and Antioxidant properties. They prevent skin infection.



Fig 3

2. **Cucumber powder:** Cucumber powder have a Antioxidant properties. They helps to natural glow to it.
3. **Aloe Vera Gel:** In onion scrub aloe vera gel act as a moisturizing agent & Softening property.
4. **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.
5. **Rice flour:** Rice flour used to minimizes the chances of blackheads, whiteheads, and acne.



Fig 4

6. **Orange peel powder:** Orange is a citrus fruit which contains different nutritional source like vitamin C. It also contain calcium, potassium etc.
7. **Chandan:** Chandan powder is used for the glowing the skin
8. **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.
9. **Rose oil:** Rose oil used for the fragrance.

Material and methods

- Plant material: onion

Method

Step 1

Fresh onion were purchased from the market and remove of the outer cover of the onion. They were cut into small pieces, placed in a beaker along with water and heated in a water bath for a certain time. After completion of heating the extracted juice was allowed to cool and then filtered using nylon mesh cloth to remove the fruit pulp and suspended solids and collected filtrate was used for various analyses.

Method of preparation

Step 2

Table 3

Ingredients	Quantity	Role
Onion juice	5 ml	Antioxidant
Cucumber powder	2 gm	Antioxidant
Aloe Vera Gel	2 gm	Moisturerizing agent
Orange peel	2 gm	Nutritional source
Gram flour	2 gm	Remove dark spots
Rice flour	2 gm	Minimize black heads
Chandan	qs	Glowing skin
Methyl paraben	2 gm	Preservative
Rose oil	4-5 drops	Fragrance

Step 3

Weight accurately all the herbal ingredients such as orange peel, cucumber powder, Gram Flour, rice flour they all passes through seive no 24 and mix them to form a uniform mixture in mortar and pestle.

Step 4

Measure accurately onion juice in another mortar weight Aloe Vera then add to mortar, add methyl paraben.

Step 5

Mix all herbal powder and triturate them until the proper consistency occurred.

Step 6

Add the Rose oil for fragrance.

Scrub well to mix all the ingredients use it on your skin and let it sleep into your overnight rinse in morning.

Ideal properties of scrub

- Non irritating
- Non sticky
- Able to remove dead skin cells

Evaluation of face onion scrub**Colour**

Yellowish orange colour of scrub was observed by visual examination.

Odour

Odour found to be aromatic.

State

Semi-Solid state of scrub observed by visually.

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.

Washability

Small quantity of scrub applied on the skin and wash with water. It is easily washable.

Irritability

Small amount of scrub applied on skin and kept for few minutes and found to be non- irritable

Results and discussion

Result of evaluation test of herbal scrub.

Table 4

Parameters	Result
Colour	Yellowish orange
Odour	Aromatic
PH	5.5 - 6
Washability	Easily washable
Stability	Stable
Irritability	Non irritable
Removal	Easily removable

Conclusion

The aim of the study was to formulate and evaluate onion scrub (*Allium Cepa* linn) Extract: for Antioxidant, antiseptic, anti-inflammatory and skin glowing activity. Gram flour, chandan, Aloe Vera Gel are mainly used in onion scrub for smoothing and moisturizing purpose. All the herbal ingredients are used so less chances of any side effects. The onion scrub used for the best result of oily skin. It can also used dry and normal skin. The prepared scrub

was formulate and evaluate using various parameters and was found to be satisfied for the application. The formulation free form microorganisms and safe for use.

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Reference

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