

International Journal of Pharmacy and Herbal Technology- ISSN NO: 2583-8962 (Online)

A REVIEW: FACE PACK CONTAINING HERBAL PLANT SHOWING ANTI-AGING ACTIVITY

Shirish B. Nagansurkar, Sanjay K Bais, Jyoti Bagale Fabtech College of Pharmacy, Sangola Corresponding author Mail ID: jyotibagale759@gmail.com

ABSTRACT:

Herbal face masks are used as prescription drugs to treat a range of skin diseases. Everyone wants to have skin that is beautiful and fair. Ayurveda says blood impurities cause skin problems. Nowadays, atopic dermatitis, acne, premature aging, and many other skin-related problems are more likely to affect human skin. The primary cause of this is the rise in allergies, bacteria, pollution, and other factors. Dull skin and acne are frequent issues that many individuals deal with. Because they are less dangerous and have fewer adverse effects, natural medicines are employed more frequently than synthetic ones. The purpose of this task is to create and assess an herbal face pack for dull skin, acne, and aging. The public can access the portion.

Keywords: Skin care, Natural ingredients, anti-aging, Acne, dull skin, etc

INTRODUCTION

Herbs are now widely used as therapeutic agents because of their availability, affordability, and lack of toxicity. People are therefore confident in these natural remedies. Herbs have long been used by humans for self-management, hygiene, and aesthetic purposes. Beauty products with desirable physiological activity, such as those that improve, smooth, heal, or condition skin, are referred to as cosmetics. These days, dark circles, black heads, and pimples are more common in young people and acne sufferers. According to Ayurveda, most skin problems are caused by impurities in the blood. Toxins accumulated in the blood due to poor nutrition and lifestyle choices are the main cause of many skin diseases.

In ancient times, women paid attention to their appearance and paid special attention to their skin type. Skin pack needs vary depending on skin type. Today, there are many types of masks for dry, normal and oily skin types. Facial mask is used to increase the whiteness and smoothness of the skin.

Dark circles, acne and wrinkles on the skin are reduced. Masks help control how quickly the sebaceous glands release sebum and fight the bad bacteria that live in acne. Recommended for people with oily skin prone to acne and blackheads. For example, kiwi fruit, rose petals, sandalwood powder and dried orange peel can help reduce residual skin.

Objective:

The objectives The Skin of Humans Is Growing More Sensitive and Adapted to Aging Faster Due To Growing Pollution, Allergies, Microbes, Etc. There has been an attempt to synthesize a pack that fits all skin types.

1. Advantages of using a face pack:

- First, it nourishes the skin. Packs of fruit extracts give skin essential nutrients.
- The amount of scars, marks, acne, and pimples reduced depends on the herbal ingredients used.
- Dead cells on the skin are usually removed by face packs.
- These face masks relax and calm the complexion.
- They help quickly regain lost skin and radiance.

- Regular use of the facial mask improves the texture and firmness of the skin, making it shiny.
- It is possible to mitigate the harmful effects of pollution and extreme weather by using face masks appropriately.
- They help stop skin from aging prematurely.

2. Herbal dermatological agents

Plant Materials

The materials used in this research were purchased from nearby stores, dried, and ground into powder for later use. The properties of the plant material used in the mask are listed below.

Sr. No.	Common Name	Scientific Name	Family
1	V:: 6:	A -411-411-1	A -41:-11:
1	Kiwi fruit	Actinidia deliciosa	Actinidiaceae
2	Emblica officinalis (Amla)	Phyllanthus emblica	Phyllanthaceae
3	Musa paradisiaca (Banana)	Musa paradisiaca Linn.	Musaceae
4	Strawberries	Fragaria x ananassa	Rosaceae
5	Citrus aurantium (Orange)	Citrus x sinesis	Rutaceae
6	Papaya	Carica papaya	Caricaceae
7	Tomato	Solanum lycopersicum	Solanceae
8	Turmeric	Curcuma longa	Zingiberaceae
9	Sandalwood	Santalum album	Santalaceae
10	Red hibiscus	Hibiscus rosa sinesis	Malvaceae
11	Ashwagandha	Withania somnifera	Solanaceae
12	Aloe vera	Aloe barbadensis miller	Asphodelaceae
13	Rose water	Rosa rubiginosa	Rosaceae
14	Chia seed powder	Salvia hispanica	Lamiaceae
15	Reetha powder	Sapindus mukorossi	Sapindaceae
16	Safforn	Crocus sativus L.	Iridaceae
17	Powdered tulsi	Ocimum tenuiflorum	Lamiaceae
18	Multani mitti	Fuller's earth	-
19	Powdered mushroom	Agaricus bisporus	Agaricaceae
20	Nutmeg	Myristica fragrans houtt	Myristicaceae

1. Kiwi fruit:

Commonly known as "green kiwi", this kiwi is a delicious variety of the genus Actinide in the family Actinidiaceae. In terms of nutritional value, health benefits, and taste, kiwi fruits are better than other popular fruits. It is abundant in a wide range of nutrients, such as vitamins, minerals, and phytoconstituents. Kiwi is a rich source of phytochemicals, including triterpenoids, saponins, amino acids, carotenoids, carbohydrates, and sugars. It also contains phenolic compounds, such as flavonoids, polyphenols, anthraquinones, and coumarins. There are numerous pharmacological effects that these ingredients can produce. High vitamin C levels raised the possibility of a treatment for cancer and heart disease, two terrible illnesses. It has the following properties: hepatoprotective, anti-platelet, anti-constipation, anti-cancer, anti-bacterial, anti-bacterial, anti-diabetic, anti-diabetic disease, anti-hypertensive, anti-thrombin, anti-aging, and anti-asthma.



Fig.1:Kiwi fruit

A. Taxonomical Classification: -

• Botanical Name: - Actinidia deliciosa

• Synonyms: Chinese gooseberries, woody vine, green kiwi

• Classification Name:

• Kingdom: Plantae

Division: Magnoliophyta Class: Magnoliopsida Subclass: Magnoliidae

• Order: Ericales

Family: ActinidiaceaeGenus: ActinidiaSpecies: Deliciosa

2. Emblica officinalis (Amla):

Emblica is a member of the Euphorbiaceae/Phyllophyllum family and is known for its excellent skin healing properties. When used topically or internally, it increases skin radiance, helps clear acne, is moisturizing and cooling, and is said to have antibacterial, antifungal, antibacterial and protective properties. Amla, also known as amla, amla, myrobalan, Indian gooseberry, Malacca tree or amla from Sanskrit amalaki, is a deciduous tree of the Amlicaceae family. [2] Phyllanthus emblica, a member of the Euphorbiaceae family, is an effective skin remedy. It is said to have the following benefits when used as a cosmetic: It brightens the skin, helps eliminate acne, moisturizes and smoothes the skin. [3]



Fig.2: Emblica officinalis (Amla)

B) Scientific Classification of Emblica Officinalis (Amla): -

• Scientific name: Phyllanthus emblica

• **Family:** Phyllanthaceae

• **Higher classification**: Leafflower

Order: MalpighialesKingdom: PlantaeRank: Specie

Advantages of Amla:

a. Initially strengthens the immune system. Vitamin C, an antioxidant-rich, water-soluble nutrient, is abundant in amla juice.

b. Promotes the health of the liver

- c. Promotes intestinal health.
- d. Encourages heart wellness.
- e. Could encourage hair growth.
- f. Enhances renal function

3. Banana, Musa paradisiaca:

The most accessible fruit in the Musaceae family, Musa paradisiaca, is used both topically and topically to lighten and smooth skin. It has an exfoliating effect and helps with sunburns. This herb also possesses antibacterial, anti-acne, and anti-aging properties. Two or three genera, including Musa, are members of the family Musaceae. This genus includes plants that bloom and produce edible bananas and plantains. There are supposedly 70 different species of musa, each with a unique set of uses. [8]



Fig.3: Banana

C. Scientific Classification of Officinalis (Banana): -

• Scientific name: Musa

• **Higher classification:** Bananas

Kingdom: PlantaeFamily: MusaceaeOrder: Zingiberale

4. Strawberries, Fragaria vesca Fragaria vesca: -

This Rosaceae family member shields skin cells from UVA-induced damage and has a high antioxidant capacity. It has anti-aging, skin-whitening, and antioxidant properties that reduce wrinkles and acne. Growing strawberries in the garden is a popular crop. Strawberries are a hybrid species of the Fragaria genus that are grown for their fruit all over the world. The fruit is prized by many for its unique aroma, deep crimson color, succulent texture, and delicious flavour. [10]



Fig.4: Strawberry

> Scientific Classification Of (Strawberry): -

Kingdom: Plantae Clade: Tracheophytes

Clade: Rosids
Order: Rosales
Family: Rosaceae
Genus: Fragaria
Species: ananassa

• Uses Of Strawberry for Skin: -

i. Remove dead skin cells and cleanse the skin.

ii. Additionally, strawberries contain vitamin C, which functions as a toner to calm irritated skin and keep skin.

iii. Vibrant and healthy.

5. Citrus aurantium (orange): -

Member of the Rutaceae family, citrus aurantium acts as a natural bleach, preventing wrinkles, blemishes, acne, and aging while giving skin an instant glow. It exhibits antifungal, antibacterial, and antioxidative properties. Oranges are spherical, orange-hued citrus fruits that ripen on trees. These nutrient-dense powerhouses are grown in warm climates all over the world, despite their Chinese origins. [15]



Fig.5: Citrus aurantium

> Scientific Classification Of (Orange): -

• Scientific name: Citrus X sinensis

Family: RutaceaeKingdom: PlantaeOrder: Sapindales

• Higher classification: Citrus

• Rank: Species

6. Papaya carica (Papaya): -

Papaya carica, a bleach that works well, belongs to the Salicaceae family. Experts say papaya can help tighten skin by removing old, dead skin cells and replacing them with new, healthy cells. Furthermore, it delays the onset of wrinkles, acne, blemishes, and premature skin aging. It protects skin from ultraviolet light. The plant commonly referred to as papaya, papaw, or pawpaw is one of the 22 identified species in the genus Carica of

the family Caricaceae. It originates in the Americas' tropics, most likely in southern Mexico or Central America. [18]



Fig.6: Papaya carica

> Scientific Classification Of (Papaya): -

• Scientific name: Carica papaya

Family: CaricaceaeOrder: Brassicales

• Higher classification: Papaya

Kingdom: PlantaeRank: Species

7. Lycopersicon esculatum (Tomato): -

The Solanaceae plant Lycopersicon esculatum employed a bleaching agent. Additionally, herbs have antiseptic, antioxidant, and anti-aging properties. It reduces black heads, acts as a repellent, and treats acne while also having a moisturizing effect. Tomatoes are naturally somewhat acidic, but they also have a lot of potassium and vitamin C, which brightens even the dullest skin. Lycopene, an antioxidant that aids in the body's defense against free radicals, is another ingredient found in tomatoes. Reduces Open Pores: Blackheads and open pores can both be reduced by tomatoes. [20]



Fig.7:Lycopersicon esculatum

Classification of (Tomato): -

Kingdom: Plantae
Clade: Angiosperms
Clade: Eudicots
Order: Solanales
Family: Solanaceae
Genus: Solanum

Species: S. lycopersicumBenefits of tomato on skin:-

- 1. Could aid in preventing skin cancer
- 2. May lessen the chance of sunburns
- 3. Could encourage the healing of wounds
- 4. May reduce irritation of the skin
- 5. Could encourage the production of collagen
- 6. Could aid in removing dead skin cells.
- 7. It may possess anti-aging properties.
- 8. May guard against harm to cells.

8 Turmeric:

It is the best blood purifier and supports wound healing. Due to its excellent blood cleansing properties, it is used in the treatment of all kinds of diseases caused by foreign substances in the blood. Haridra rejuvenates the skin and delays signs of aging such as wrinkles. It is an excellent antiallergic and anti-inflammatory agent. Numerous clinical trials have examined the effects of curcumin and turmeric on a range of human diseases and conditions, but there has been no conclusive evidence of any health benefits or anti-disease effects. As of 2020, there is no scientific proof that curcumin lowers inflammation. Weak evidence suggests that using turmeric extracts could help reduce knee osteoarthritis symptoms. [22]



Fig.8: Turmeric

• Botanical Name: Curcuma Longa

• Family: Zingiberaceae

• Genus: Curcuma

9.Sandalwood

There are numerous advantages to topically applying red sandalwood. It nourishes and keeps our skin clear, healthy, and glowing. For dull, lifeless skin, red sandalwood is also considered a skin-saving solution Apart from these benefits, this amazing ingredient is also known for its ability to treat uneven skin tone, tighten the skin and create firmer, brighter and more radiant skin. Rosewood is a blessing for oily, acne-prone skin. It controls excess oil and treats large pores that can cause severe pain.



Fig.9: Sandalwood

• Botanical name: Pterocarpus santalinus

• Family: Fabaceae family

• Genus: Pterocarpus santalinus

Uses:

i.Sandalwood contains a lot of antioxidants; it can prevent wrinkles from forming as a result of skin sagging and aging.

ii.Treats acne: Sandalwood can be used to prevent the dreaded acne on your skin.

iii.Eliminates scars.

iv.Calms down the skin.

10.Rosa Hibiscus Sinesis

Finally, hibiscus naturally contain a large amount of mucilage, a sticky substance produced by plants that helps with food and water storage. Mucilage is a wonderful natural moisturizer that is gentle on sensitive skin. ^[26]



Fig.10: Rosa Hibiscus Sinesis

• Botanical name: Hibiscus rosa-sinensis

Family: MalvaceaeGenus: Hibiscus

11. Ashwagandha

The natural oils that the skin requires are produced more readily when ashwagandha is used. It keeps the skin calmed, cleansed, and nourished while aiding in the reduction of acne. It is well known to have anti-aging qualities that preserve the skin's elasticity. As a Rasayana, or rejuvenator, ashwagandha helps protect the skin from UV radiation damage. Ashwagandha, which is regarded as a superfood for the skin, deeply cleans, moisturizes, soothes, and gives the skin a natural glow^[28]



Fig.11: Ashwagandha

• Botanical Name: Withaniasomnifera

Family: SolanaceaeGenus: Withania

12. Aloe Vera:

It's An Excellent Skin Burn Therapy. It also aids in accelerating the reproduction of skin cells. Aloe Vera Provides Relief for People with Acne. Aloe Vera can be made into lotions, gels, soaps, or cosmetics to apply topically as a medication. When a person is allergic to aloe Vera, they may develop dermatitis, which causes a mild skin rash, itching, difficulty breathing, or swelling of the lips, tongue, or face. It can also reduce nose abrasions. Cosmetic companies often add aloe Vera juice or other ingredients to their products, such as lotions, wipes, moisturizers, soaps, sunscreens, incense, shaving cream, and shampoos. "It is moisturizing" According to the analysis of study materials, its "softening effect" is the reason why it is included in many hygiene products.

• Botanical Name: Aloe Barbadensis Miller

• Family: Aloaceae, Asphodelaceae

• Genus: Aloe



Fig.12: Aloe Vera

13.Rose Water:

Rose water can help soothe acne-related discomfort, prevent further swelling, and lessen redness on the skin. In medieval Europe, rose water was used to wash hands at the table during meals. Rose water is a component of perfumes. Rose water is sometimes used in cosmetics such as cooling lotions, toners, and cleansers, and as an emollient in rose water. In India, rose water is often sprayed as a perfume and used as a facial moisturizer, especially during winter months. It is also used as a welcome spray in Indian weddings. [33]



Fig.13: Rose Water

• Botanical Name: Rosa Damascena Mill L.

• Family: Rosaceae • Genus: Rosa L.

14. Chia seed powder:

The small, oval, light or dark brown seeds of the mint family are added to many foods to provide micronutrients and fiber. The binomial name is Salvia Hispanica [22].



Fig.14: Chia seed powder

• Kingdom: Magnoliphyta

Division: PlantaeFamily: Lamiaceae;Order:LamialesGenus: Salvia

Sort: S. hispanicaChia seed uses:

a. Protects Against Free Radical Damage

b. Hydrates Serum-Reddening Skin

c. Calms and Reduces Skin Inflammation

15.Reetha powder

Arishtak, also known as Reetha or soap fruit, is a term used in Ayurveda and means "soap tree" in India. It is widely used as a hair cleanser and is known for its medicinal properties. Reetha is widely used in natural hair care products as it adds shine, luster and health to the hair. [30]

Uses:

It moisturizes the skin, keeping it from drying out and maintaining its softness and suppleness. Promotes a flawless complexion and skin tone equilibrium.



Fig.15: Reetha powder

Kingdom: Plantae
Order: Sapindales
Family: Sapindaceae
Genus: Sapindus
Species: S.mukorossi

• Botanical name: Sapindus mukorossi.

16. Saffron:

It is produced only from the dried stigma and upper part of the crocus plant, which belongs to the iris family. It contains a high concentration of carotenoid glycosides, primarily terpenoids. It gives fair, radiant skin and lightens the tone of the skin. [35]



Fig.16:Saffron

17) Tulsi Powder:

Ocimum tenuiflorum is a fragrant plant from the Lamiaceae family. It originated from the Indian subcontinent and spread to the tropical countries of Southeast Asia as a cultivated plant. [38]



Fig.17:Powdered tulsi

Medication profile:Kingdom: Plantae

• Separation: Thoroliphyta

• Lamiales is the order.

Family:LamiaceaeGenus: Optimum

• Animal: Tenuiflorum

• Name in botany: Ocimum tenuiflorum

Uses:

Treats acne.

Encourages beneficial skin aging.

Lessens the pigmentation.

Relieves eczema and other skin ailments.

18. Calcium bentonite (multani mitti): -

• Scientific name: Fuller's Earth.

• Synonym: Multani mitti.

• Chemical constitute: Silica, iron oxide, lime, magnesia and water.



Fig: -No-18. multani mitti

Uses:

Combat acne and zits.

Eliminates extra oil and sebum while deeply cleansing the skin to get rid of pollutants, sweat, and grime.

Brightens complexation and balances skin tone.

Treats pigmentation and tanning.

Calcium bentonite clay benefits the skin in many ways, including reducing pores and removing blackheads and whiteheads. [39]

19.Powdered mushrooms:-

Polypore's, worms, jelly mushrooms, coral mushrooms, pier mushrooms, stink mushrooms and cup mushrooms are all called "mhrooms". For this reason, the word has a broad usage in referring to large fruiting fungal bodies rather than its main taxonomic clarification. The number of recognized species of mushrooms is about 14, 000. [29]



Fig: - No-19.Powdered mushrooms

Drug profile:

• Kingdom: Fungi

• **Division:**Basidiomycota

• Class: Agaricomycetes

• Order: Agaricales

• Family: Agaricaceae

• Genus: Agaricus

• **Species**:A. bisporus

❖ Uses:-

a. Hydrates skin

b. Treats acne

c. Anti-aging

20. Nutmeg (Myristica fragrans):

Nutmeg is widely used for its analgesic, anti-inflammatory, antiseptic and antibacterial properties. It helps reduce fine lines, wrinkles and other signs of aging. It also reduces and blurs the appearance of acne scars.^{40]}



Fig.20:Nutmeg

CONCLUSION

Because natural remedies are perceived as safer and having fewer side effects than synthetic ones, people are more likely to accept them. Today's population requires side-effect-free treatments for a range of skin disorders. The use of herbal ingredients enabled the development of safe cosmetic formulations. Herbal facial treatments are considered an effective and long-lasting way to improve your skin. Therefore, the current work is an attempt to make a good face mask using simple ingredients like aloe Vera, orange peel, turmeric, and sandalwood and multani mitti. Using herbal cosmetics has the advantage of preserving the skin's elasticity, enhancing blood circulation, energizing the muscles.

REFERENCE

- 1. U. Jain, Beauty through Herb. Institute of herbal science publishers, 1, 1997, 23-27.
- 2. S.R. Rani, and Hiremanth, Text book of Industrial pharmacy, Drug delivery systems & Cosmetics & Herbal drug technology Universities press (India) Ltd, 2, 2002.
- 3. B.M. Mithal, and R.N. Saha, a Hand book of cosmetics MK Jain, 2, 2004.
- 4. S. Saraf, and S.H. Saraf, Cosmetics a practical manual Pharma med press 2, 2005, 126-129.
- 5. D. Chanchal, and S. Saraf, Herbal Photoprotective Formulations and their Evaluation, the Open Nat Prod Journal 2, 2009, 71-76.
- 6. K. Kumar, K. Sasikanth, M. Sabareesh, and N. Dorababu, Formulation and EvaluationOf Diacerein Cream, Asian J Pharm Clin Res, 4(2), 2011, 93-98.
- 7. A. Madan, A. Abhishek, and S. Verma, A Pilot study to evaluate safety and efficacy of Papenglow (Herbal Face-Pack) in healthy human subjects, Internat J of Adv Res, 2(4), 2014,356-359.
- 8. J.B. Wilkinson, and R.J. Moore, Face Packs and Masks In: Harry's Cosmetology Longman Group, London, 1982, 276-284.
- 9. R.K. Chaudhuri, Emblica cascading antioxidant: a novel natural skin care ingredient, Skin Pharmacol Appl Skin Physiol, 15(5), 2002, 374-80.
- 10. Y. Virendra, D. Brijesh, S. Shobha, and D. Babli, Amla (Emblica officinalis) Medicinal Food and Pharmacological Activity, Int j pharm che sci, 3(3), 2014, 616-19.
- 11. M.B. Kavita, and K.J. Mallika, Amalaki (Indian goosberry): An ancient food Supplement, Int J ResAppl Pharm, 4(1), 2013, 11-14.
- 12. M. Sankaran, V. Velusamy, and K. Mani, Amla: a novel ayurvedic herb as a functional Food for health benefits a mini review, Int j pharm sci, 5(1), 2013, 1-4.
- 13. Z.I. Mohammad, and A. Saleha, Musa paradisiaca L. and Musa sapientum L.: A Phytochemical and Pharmacological Review, J Applied Pharm Sci, 1(5), 2011, 14-20.
- 14. Venkatesh, V. Krishna, K.K. Girish, K. Pradeepa, K.S.R. Santosh, Antibacterial activity Of ethanol extract of musa paradisiaca cv. Puttabale and musa acuminate cv. Grand naine, Asian j pharm clin res, 6(2), 2013, 169-172.
- 15. M.M. Shella, A.K. Godellver, and F. Fatuma, Documentation and Phytochemical Screening of Traditional Beauty Products Used in Missenyi District of Tanzania, J Cos Der. Sci Appl, 4, 2014, 355-64.
- 16. M. Parle, and D. Chaturvedi, Orange: range of benefits, Int Res J Phar, 3 (7), 2012, 60-63.
- 17. A. Jyotsna, and S. Saonere, An overview of Citrus aurantium used in treatment of Various diseases. African J Plant Sci, 5(7), 2011, 390-95.

- 18. G. Aravind, B. Debjit, S. Duraivel, and G. Harish, Journal of Medicinal Plants Studies. JMed Plants Studies, 1(1), 2013, 7-15.
- 19.A. Marconi, M.C. Panza, D.M. Bonnet, K. Lazou, R. Kurfurst, F. Truzzi, R. Lotti, G.Desantis, M. Dumas, F. Bonte, and C. Pincelli, Expression and function of neurotrophinsAnd their receptors in human melanocytes, Int J Cosmetic Sci, 28, 2006, 255-61.
- 19. Yadav N & Yadav R, Preparation and Evaluation of Herbal Face Pack, International Journal of Recent Scientific Research, 2015; 6, 5: 4334–4337.
- 20. Pawar Champat S, Bakliwal S. R, Rane B. R, Gajarathi N. A, Pawar S.P. A Short Review On Novel Approch Of Cream, Pharma Science Monitor An International Journal Of Pharmaceutical Sciences, 2013; 4: 3.
- 21. Pratiksha Vishnu Kale, Prof. Nakhate S., Dr. Hingane L.D. "Formulation and Evaluation of Herbal Face Pack for Glowing Skin", International Journal of All Research Education and Scientific Methods (IJARESM), ISSN: 2455-6211, 2021; 9, 12: 7 429.
- 22. Ramakrishna S., Gopikrishna UV, "Formulation and Evaluation of Herbal Face Pack "Journal of Emerging Technologies and Innovative Research (JETIR) www.jetir.org© 2021 JETIR December, 2021; 8: 12. www.jetir.org (ISSN-2349-5162)
- 23. M Laxmi and S.Vijayalaxmi, Development and Evaluation of Herbal Face Pack Using Various Plant Powders, Indo Am. J. P. Sci, 2017; 4(09).
- 24. Anupama Shukla, Pankaj Kothari, Akhilesh Shukla, CR Yadav AN AYURVEDIC OUTLOOK TO MUKHA LEPA (FACE PACK) FOR BEAUTY CARE, Global J Res. Med. Plants & Indigen. Med., 2016; 5(6): 194–202.
- 25. Saloni Jain, Narendra Silawat, Neetesh K. Jain, Design, Optimization, and Characterization of Herbal Face Pack, Journal of Pharmaceutic Asian Journal of Pharmaceutics, Jan-Mar, 2022; 16(1), 16(1): 72.
- 26. Rubina S.K., Neelofar Sulatna S., Mohana Priya R., Parameswari C.S., Ramana B. V, Badarinath A.V. FORMULATION AND EVALUATION OF NATURAL HERBAL FACE PACK, World Journal of Pharmaceutical Research, 2017; 6: 8.
- 27. Prachi D. Barsagade, Pranali Patil and Dr. Milind J. Umekar, "A FORMULATION OF FACE PACK AND HAIR PRODUCTS OF RICE WATER FOR THE USE OF SKIN AND HAIR PROBLEM" WORLD JOURNAL OF PHARMACY AND PHARMACEUTICAL SCIENCES, 2020; 9: 4.
- 28. D. K. Sanghi, Rakesh Tiwle. Formulation and Charaterization of Herbal Face Wash/Scruber. Europrean Journal of Pharmaceutical and Medical Research, 2016; 3(11): 274-278.
- 29. Ashok Kumar, R.M. Rakesh. Evaluated of Prepared Face Pack and To Comapre Formulated Face Pack With Marketed Face Packs. International Journal of Pharmaceutical Sciences Review and Research, 2010; 3(1): 120-126.
- 30. Sachin B Somwanshi, Kiran S Kudale, Ramdas T Dolas, Kiran S Kotade. Formulationand Evaluation of Cosmetic Herbal Face Pack for Glowing Skin. International Journal of Research in Ayurveda and Pharmacy, 2017; 8(3): 199-203.
- 31. Skin Benefits of Cinnamon/Dalchini. Published online on, 2020; 3.
- 32. Orange Peel Biological Sources, Morphological Features, Chemical Constituents and Uses. November, 2020; 03.
- 33. Reetha Uses, Benefits, Side Effects and Dosage, 2017.
- 34. Ways you can use orange peels to get glowing skin. Updated on March, 2021; 02.
- 35. Saraf S., and Saraf Sh., Cosmetics a practical manual, Pharma med press, 2005; 2:126-129.

- 36. Rani, S. R. and Hiremanth, Text book of Industrial pharmacy, Drug delivery systems & Cosmetics & Herbal drug technology: Universities press (India) Ltd, 2002; 2.
- 37. Chanchal D. and Saraf S. Herbal Photoprotective Formulations and their Evaluation. The Open Nat Prod Journal, 2009; 2: 71-76.
- 38. Pasupuleti Visweswara Rao, Siew Hua Gan. Cinnamon A Multifaceted Medicinal Plant. Evid Based Complement Alternat Med. Published online, 2014; 10.
- 39. R. Rajeshwari, M. Umadevi, C. Sharmila Rahale, S. Selvavenkadesh, K. P. Sampath Kumar, Debjit Bhowmik. Aloe vera The Miracle Plants Itss Medicinal and Traditional. Journal of Pharmacognosy and Phytochemistry, 2012; 1(4): 118-124.
- 40. P. Benard, M. Zarebanadkouki, C. Hedwig, M. Holz, M.A. Ahmed, and A. Carminati, Pore-Scale Distribution of Mucilage Afecting Water Repellency in the Rhizosphere P Vadose Zone, 2018.
- 41. Hiremanth and Shoba Rani R. The second edition of the textbook on industrial pharmacy, drug delivery systems, cosmetics, and herbal drug technology is published by Universities Press (India) Ltd.
- 42. M. Yazawa, T. Matsuyama, and T. Akihama. "Transgenic Kiwi Fruit (Actinidia deliciosa)," 2001, Vol. 47: 1–12.