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A Review on Herbal Gel Face Wash with Scrub

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ABSTRACT
Cosmetics play a vital role for everyone to have a joy full and sanguine life .in present scenario Herbal cosmeceuticals have more demand because they have no side effect. People having oily Skin suffer from acne, white heads and black heads quite often so scrubbing become more Essential .in our present study we formulated formulation F1 in gel form for oily skin by using Turmeric, aloe Vera, Sinnamon, potato starch, activated charcoal powder Honey, green tea, Lemon juice, coconut oil, SLS, water and evaluated by using various parameters such as Physical appearance, viscosity, Ph, Spreadibility, irritability, stability studies and got a fruit full Result with all the tests. The scrub was found to show excellent effect on controlling oil Secretion and preventing formation of new pimples. The herbal formulation was having Characteristics order, 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 spread satisfactorily. Thus, the Formulated scrub can be utilized efficaciously without a side effect which exfoliates and makes Glowing skin.

Key words*- cosmetics, herbal cosmeceuticals, herbal formulation, skin, scrub*

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I. INTRODUCTION

HERBAL COSMETICS

The word "cosmetics" arises from a Greek word "*kosmeticos"* which means to adorn. Since that time any material used for beautification or improvement of appearance is known as cosmetic. The urge to adorn one's own body and look beautiful has been an urge in thehuman race since the tribal days. Earlier both males and females were equal competitors for improvement of appearance. Males decorated themselves with animal parts vegetable leaves etc, while women did by wearing any colored stones or flowers round their neck and the wrists[1]. At the later stage they employed colored earth for faces and bodies and stroll later colored ointments. Bangles and neck less made of baked earth also became common in the early civilization as well as shells of various kinds obtained from nature. In digging up the ancient Egyptian tombs much light has fallen on the ancient practices of beautification. Pharaoh an tombs have revealed that colored earths were like malachite green. The copperore was used as eye shadows. Lamp black was common too for eyes. For dyeing of hairs red was also practiced. The dancing ladies applied ointments perfumed with materials like myrrh to head so that when they danced the perfumed perfumed ointment would flow down their bodies emitting pleasant smell all over. The history also records that when Jehu went to the town of jezebel she painted her face and looked out from window. The use of cosmetics in ancient Egypt reached heights with the famous queen Cleopatra who tried to beguile Caesar and Anatomy the Romans when they visited Egypt. Shakespeare has summarized it by this line, "had Cleopatra's nose been longer, the shape of the world would have been different". The women of the world feel inspired when they have mental feeling that they are looking good[2]. Hence, the practice of adornment or improvement of appearance continuous unabated across the centuries. Various kinds of natural materials were used for the purpose. The practice of use of cosmetics must have grown to an appreciable extent because the British parliament enacted a law in 1770, which still stands unrevealed and is as follows:- "that all women of whatever age, rank, profession or degree whether virgins, maids or widows that shall from and after such act impose upon, seduce betray into matrimony any his majesty's subjects by the scent, paints, cosmetics, washes, artificial teeth, false hair, Spanish wool, iron stays, hoops, high heeled shoes, bolstered hips, shall incur the penalty of law in force against witchcraft and like misdemeanors and that such marriage upon conviction shall stand null and void"[3].

It is interesting to note that even materials like high heeled shoes, artificial denture etc. are classed as materials of adornment. One wonders how any females were so prosecuted and their marriages nullified. It was an act of distinction between male female subjects. Maybe the circumstances prevailing then were such that law was considered essential. [4]

In modern days cosmetics are the range and are considered to be essential commodities oflife. The role of cosmetics in everyday life met greater acceptability after World War II. It was realized al and medical

scientists that cosmetics not only adore but they exercise psychological effect on users and especially on the skin. They keep the skin supple delaying the onset of wrinkling prevents from infections and sunburns. [5]

In last 3-4 decades the use of cosmetics has increases exponentially not only among in females but the male population also indulges in their use. Hair dyes, powder, creams are as popular with males as with females. Most countries have now laws to control, manufacture, labeling, sale etc. of cosmetics in such a way that use of cosmetics harmful to health is prevented. In Indian drugs act has been renamed as drugs and cosmetics act and contains some sections to exercise over cosmetics[6].

The cosmetics in general are external preparations and are meant to be applied to external paths of the body. In other words they may be applied to skin, hairs, nails, for the purposes of covering, coloring, softening, cleansing, nourishing, waving, setting, mollification, preservation, removal and protection. The cosmetics may be classified into 4 main groups namely-

1) Cosmetics for skin
2) Cosmetics for hair
3) Cosmetics for nails
4) Cosmetics for hygiene (dental, bathing, etc.)

All cosmetics are formulated as solids, semi-solids or liquids. Their formula is designed to very known to drug dosage forms[6,7].

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COSMETICS FOR THE SKIN [8, 9, 10]

The skin covers vast area of body and cosmetics are applied to many parts, the most important part being the face. The skin cosmetics are formulated in the form of solids, semi- solids and liquids. The solids consist of powder s with different degrees of flow and angle of repose or of compacts. The semi-solids may be emulsions or simple admixtures and liquids are both monophasic and biphasic. The solid products consist of face powders, body powders, compacts and moulded products like lipsticks. Face powders which are applied to the face consist of many ingredients besides covering agents like zinc oxide or titanium dioxide. They remove oily appearance and give the face a smooth, dry and peach-like finish. The face powder as per their covering power is classified as light, medium or heavy powders. Some face powers are slightly tinted on the pink side. Face powders are packed in elegant plastic boxes with lids.

1. The origin of cosmetics forms a continuous narrative throughout the history of man as theydeveloped. The man in prehistoric times 3000BC used colours for decoration to attract the animals that he wished to hunt and also the man survived attack from the enemy by colouring his skin and adorned his body for protection to provoke fear in an enemy (whether man or animal)
2. The origin of cosmetics were associated with hunting, fighting, religion and superstition and later associated with medicine
3. Herbal Cosmetics, here in after referred as Products, are formulated, using various permissible cosmetic ingredients to form the base in which one or more herbal ingredients are used to provide defined cosmetic benefits only, shall be called as "Herbal Cosmetics" .
4. Beginning 1990's cosmetic manufacturer adapted a term 'cosmeceuticals' to describe the OTC skin care products that claims therapeutic benefit by addition of plant based active ingredient such as alpha- hydroxyl acid, retinoic acid, ascorbic acid and coenzyme Q10
5. These active ingredients serves many purposes viz. increase in skin elasticity, delay in skin aging by reducing the wrinkles, protection against UV radiation by antioxidant property and to check degradation of collagen respectively
6. The skin and hair beauty of individuals depends on the health, habits, routine job, climatic conditions and maintenance

7. The skin due to excessive exposure to heat will dehydrate during summer and causes wrinkle, freckles, blemishes, pigmentation and sunburns. The extreme winter cause damages to the skin in the form of cracks, cuts, maceration and infections
8. The skin diseases are common among all age groups and can be due to exposure towards microbes, chemical agents, biological toxin present in the environment, and also to some extend due to malnutrition
9. The only factor they had to rely on was the knowledge of nature compiled in the ayurveda. The science of ayurveda had utilized many herbs and floras to make cosmetics for beautification and protection from external affects
10. The natural content in the botanicals does not cause any side effects on the human body; instead enrich the body with nutrients and other useful minerals
11. The cosmetics, according to the Drugs and Cosmetics Act is defined as articles intendedto be rubbed, poured, sprinkled or sprayed on, introduced into or otherwise applied to the human body or any part thereof for cleansing, beautifying, promoting attractiveness or altering the appearance
12. The cosmetic does not come under the preview of drug license. The herbal cosmetics are the preparations containing phytochemical from a variety of botanical sources, which influences the functions of skin and provide nutrients necessary for the healthy skin or hair
13. The natural herbs and their products when used for their aromatic value in cosmetic preparation are termed as herbal cosmetics
14. There is common belief that chemical based cosmetics are harmful to the skin and an increased awareness among consumers for herbal products triggered the demand for natural products and natural extracts in cosmetics preparations

15 .The increased demand for the natural product has created new avenues in cosmeceutical market. The Drug and Cosmetics Act specify that herbs and essential oils used in cosmetics must not claim to penetrate beyond the surface layers of the skin nor should have any therapeutic effect

16. The legal requirement and the regulatory procedures for herbal cosmetics are same as that for other chemical ingredients used in cosmetic formulations
17. The requirements for the basic skin care: - Cleansing agent: which remove the dust, dead cells and dirt that chokes the pores on the skin. Some of the common cleansers include vegetable oils like coconut, sesame and palm oil.
18. Toners: - The toners help to tighten the skin and keep it from being exposed to many of the toxins that are floating in the air or other environmental pollutants. Some of the herbs used as toners are witch hazel, geranium, sage, lemon, ivy burdock and essential oils.
19. Moisturizing: - The moisturizing helps the skin to become soft and supple.

a) HUMAN SKIN-

The human skin is the outer covering of the body and is the largest organ of the integumentary system. The skin has up to seven layers of ectodermal tissue and guards the underlying muscles, bones, ligaments and internal organs. Human skin is similar to most of the other mammal's skin, and it is very similar to pig skin. Though nearly all human skin iscovered with hair follicles, it can appear hairless. There are two general types of skin, hairy and glabrous skin (hairless). The adjective cutaneous literally means "of the skin" (from Latin *cutis*, skin).

Because it interfaces with the environment, skin plays an important immunity role in protecting the body against pathogens and excessive water loss. Its other functions are insulation, temperature regulation, sensation, synthesis of vitamin D, and the protectionof vitamin B folates. Severely damaged skin will try to heal by forming scar tissue. This is often discolored and depigmented.

In humans, skin pigmentation varies among populations, and skin type can range from dryto oily. Such skin variety provides a rich and diverse habitat for bacteria that number roughly 1000 species from 19 phyla, present on the human skin.

Structure:- Skin has mesodermal cells, pigmentation, such as melanin provided by melanocytes, which absorb some of the potentially dangerous ultraviolet radiation (UV)in sunlight. It also contains DNA repair enzymes that help reverse UV damage, such that people lacking the genes for these enzymes suffer high rates of skin cancer. One form predominantly produced by UV light, malignant melanoma, is particularly invasive, causingit to spread quickly, and can often be deadly. Human skin pigmentation varies among populations in a striking manner. This has led to the classification of people(s) on the basisof skin color.

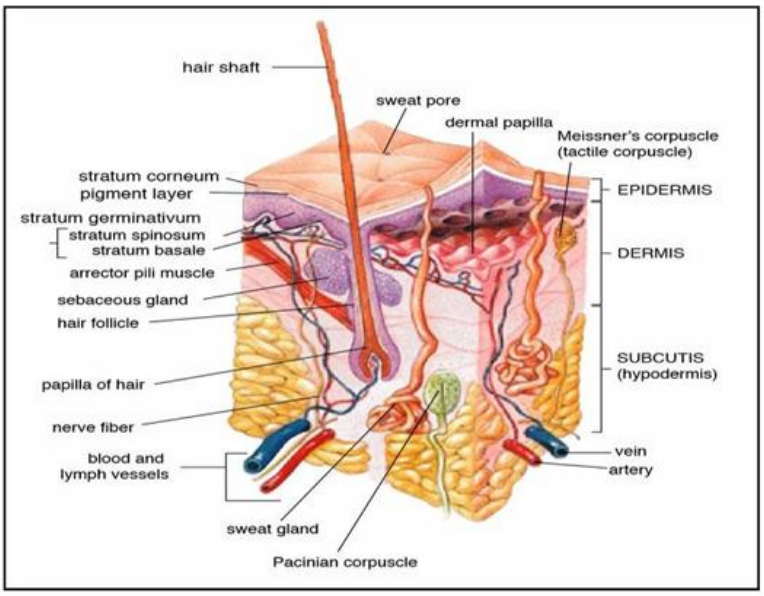
In terms of surface area, the skin is the second largest organ in the human body (the inside ofthe small intestine is 15 to 20 times larger). For the average adult human, the skin has a surface area of between 1.5-2.0 square metres (16.1-21.5 sq ft.). The thickness of the skin varies considerably over all parts of the body, and

between men and women and the young and the old. An example is the skin on the forearm which is on average 1.3 mm in the male and 1.26 mm in the female. The average square inch (6.5 cm^2) of skin holds 650 sweat glands, 20 blood vessels, 60,000 melanocytes, and more than 1,000 nerve endings. The average human skin cell is about 30 micrometers in diameter, but there are variants. A skin cell usually ranges from 25-40 micrometers (squared), depending on a variety of factors.

Skin is composed of three primary layers: the epidermis, the dermis and the hypodermis.

Epidermis-

The epidermis contains no blood vessels, and cells in the deepest layers are nourished almost exclusively by diffused oxygen from the surrounding air and to a far lesser degree by blood capillariesextending to the outer layers of the dermis. The main type of cells which make up the epidermis are Merkel cells, keratinocytes,with melanocytes and Langerhanscells also present. The epidermis can be further subdivided into the following *strata* (beginning with the outermost layer): corneum, lucidum (only in palms of hands and bottoms of feet), granulosum, spinosum, basale. Cells are formed through mitosis at the basale layer. The daughter cells (see cell division) move up the strata changing shape and composition as they die due to isolation from their bloodsource. The cytoplasm is released and the protein keratin is inserted. They eventually reach the corneum and slough off (desquamation). This process is called "keratinization". This keratinized layer of skin is responsible for keeping water in the body and keeping other harmful chemicals and pathogens out, making skin a natural barrier to infection.



Components- [11,12]

The epidermis contains no blood vessels, and is nourished by diffusion from the dermis. The main type of cells which make up the epidermis are keratinocytes, melanocytes, Langerhans cells and Merkel cells. The epidermis helps the skin to regulate body temperature.

Layers-[13,14]

Epidermis is divided into several layers where cells are formed through mitosis at the innermost layers. They move up the strata changing shape and composition as they differentiate and become filled with keratin. They eventually reach the top layer called stratum corneum and are sloughed off, or desquamated. This process is called keratinization and takes place within weeks. The outermost layer of the epidermis consists of 25 to 30layers of dead cells.

Sub layers

Epidermis is divided into the following 5 sub layers or strata:

- Stratum corneum
- Stratum lucidum
- Stratum granulosum

- Stratum spinosum
- Stratum germinativum (also called "stratum basale").

Blood capillaries are found beneath the epidermis, and are linked to an arteriole and a venule. Arterial shunt vessels may bypass the network in ears, the nose and fingertips.

Genes and proteins expressed in the epidermis

About 70% of all human protein-coding genes are expressed in the skin. Almost 500 genes have an elevated pattern of expression in the skin. There are less than 100 genes that are specific for the skin and these are expressed in the epidermis. An analysis of the corresponding proteins shows that these are mainly expressed in keratinocytes and have functions related to squamous differentiation and cornification.

Dermis[15]

The dermis is the layer of skin beneath the epidermis that consists of connective tissue and cushions the body from stress and strain. The dermis is tightly connected to the epidermis bya basement membrane. It also harbors many nerve endings that provide the sense of touch and heat. It contains the hair follicles, sweat glands, sebaceous glands, apocrine glands, lymphatic vessels and blood vessels. The blood vessels in the dermis provide nourishment and waste removal from its own cells as well as from the Stratum basale of the epidermis.

The dermis is structurally divided into two areas: a superficial area adjacent to the epidermis, called the papillary region, and a deep thicker area known as the reticular region.

Papillary region

The papillary region is composed of loose areolar connective tissue. It is named for its fingerlike projections called papillae that extend toward the epidermis. The papillae provide the dermis with a "bumpy" surface that interdigitates with the epidermis, strengthening the connection between the two layers of skin.

In the palms, fingers, soles, and toes, the influence of the papillae projecting into the epidermis forms contours in the skin's surface. These epidermal ridges occur in patterns(see: fingerprint) that are genetically and epigenetically determined and are therefore unique to the individual, making it possible to use fingerprints or footprints as a meansof identification.

Reticular region

The reticular region lies deep in the papillary region and is usually much thicker. It is composed of dense irregular connective tissue, and receives its name from the dense concentration of collagenous, elastic, and reticular fibers that weave throughout it. These protein fibers give the dermis its properties of strength, extensibility, and elasticity.

Also located within the reticular region are the roots of the hairs, sebaceous glands, sweat glands, receptors, nails, and blood vessels.

Tattoo ink is held in the dermis. Stretch marks often from pregnancy and obesity are also located in the dermis.

Subcutaneous tissue [16]

The subcutaneous tissue (also *hypodermis* and *subcutis*) is not part of the skin, and lies below the dermis of the cutis. Its purpose is to attach the skin to underlying bone and muscle as wellas supplying it with blood vessels and nerves. It consists of loose connective tissue, adipose tissue and elastin. The main cell types are fibroblasts,macrophages and adipocytes (subcutaneous tissue contains 50% of body fat). Fat serves as padding and insulation for the body.

Functions:-[17,18,19]

Skin performs the following functions:

1. **Protection**: an anatomical barrier from pathogens and damage between the internal and external environment in bodily defense; Langerhans cells in the skin are part of the adaptive immune system. Perspiration contains lysozyme that break the bondswithin the cell walls of bacteria.
2. **Sensation**: contains a variety of nerve endings that react to heat and cold, touch, pressure, vibration, and tissue injury; see somatosensory system and haptics.
3. **Heat regulation**: the skin contains a blood supply far greater than its requirements which allows precise control of energy loss by radiation, convection and conduction. Dilated blood vessels increase perfusion and heatloss, while constricted vessels greatly reduce cutaneous blood flow and conserve heat.
4. **Control of evaporation**: the skin provides a relatively dry and semi-impermeable barrier to fluid loss. Loss of this function contributes to the massive fluid loss in burns.
5. **Aesthetics and communication**: others see our skin and can assess our mood, physical state and

attractiveness.

6. **Storage and synthesis**: acts as a storage center for lipids and water, as well as ameans of synthesis of vitamin D by action of UV on certain parts of the skin.
7. **Excretion**: sweat contains urea; however its concentration is 1/130th that of urine, hence excretion by sweating is at most a secondary function to temperature regulation.
8. **Absorption**: the cells comprising the outermost 0.25–0.40 mm of the skin are "almost exclusively supplied by external oxygen", although the "contribution to total respiration is negligible". In addition, medicine can be administered through the skin, by ointments or by means of adhesive patch, such as the nicotine patch or iontophoresis. The skin is an important site of transport in many other organisms.
9. **Water resistance**: The skin acts as a water-resistant barrier so essential nutrients are not washed out of the body.

DRUG PROFILE (MAIN INGREDIENT) [20,21,22,23,24]

Phoenix dactylifera, commonly known as date or date palm**,** family (arecaceae), is cultivated for sweet edible fruit.

Cultivation-Dates are an important traditional crop in Iraq, Iran, Arabia, and North Africa west to Morocco. Dates (especially Medjool and Deglet Noor) are also cultivated in America in southern California, Arizona and southern Florida in the United States and in Sonora and BajaCalifornia in Mexico.

Date palms can take 4 to 8 years after planting before they will bear fruit, and start producing viable yields for commercial harvest between 7 and 10 years. Mature date palms can produce 150–300 lb (70–140 kg) of dates per harvest season. They do not all ripen at the same time so several harvests are required. To obtain fruit of marketable quality, the bunches of dates must be thinned and bagged or covered before ripening so that the remaining fruits grow larger and are protected from weather and animals that also live off of it, such as birds. Date palms require well-drained deep sandy loam soils with pH 8-11. The soil should have the ability to hold the moisture. The soil should also be free from calcium carbonate

Uses and nutritional value- basically used as sweeting agent, in syrup, candies, ediblebaby powder, fruit syrup, as substitute of honey, thick syrup used for coating tablets or gutikas and also for leather prevent from leaking. Dates provide a wide range of essential nutrients, and are a very good source of dietary potassium. The sugar content of ripe dates is about 80%; the remainder consists of protein, fiber, and trace elements including boron, cobalt, copper, fluorine, magnesium, manganese, selenium, and zinc. The glycemic index for three different varieties of dates are 35.5 (khalas), 49.7(barhi).

The caffeic acid glycoside 3-O-caffeoylshikimic acid (also known as dactylifric acid) and its isomers, are enzymic browning substrates found in dates.

Dates are also high in antioxidants, which may contribute to many of their health benefits. Dates

contain several vitamins and minerals, in addition to fiber and antioxidants. However, they are high in calories since they are a dried fruit.

- Dates are a source of antioxidants. All dates, fresh or dried, contain different types of antioxidants. Dates can be good for blood sugar balance, Diabetes researchers have shown that dates have a low glycemicS impact, help reduce blood pressure, contain a brain booster, help maintain bone mass.

TABLENO.1-LIST OF INGREDIENTS USED IN GEL FACE WASH

SR. NO.	INGREDIENTS	BOT ANICAL NAME	USES
1.	NEEM LEAVESEXTRACTS	*Azadirachta indica*	Antibacterial, anti-inflammatory, antiseptic,antifungal, highly useful for oily skin and for open pores
2.	ROSE PETALS EXTRACTS	*Rosa*	Gentle antiseptic and anti-inflammatory, cleanse skin and blemishes, soothe irritationand redness
3.	LEMON PEEL EXTRACTS	*Citrus lemon L*	It reduces blemishes, lighten skin color, marks, acne, naturally skin ph balance,
4.	ORANGE PEELEXTRACTS	*Citrus reticulate*	Anti-microbial, anti-inflammatory,antioxidant, removes dead skin, tighten skin, balance skin ph by absorbing the excessive oil
5.	LIQUORICERHIZOMES EXTRACT	*Glycerrhizaglabra*	Gives soothing effect, natural foamproducer, rejuvenating and nutritive value
6.	ALOE VERA PULP	*A.barbadensis Mill.*	Retain moisture by forming protective layer, rich in antioxidants, anti-inflammatory,
7.	ORANGE PEEL ESSENCE	*Citrus reticulate*	For fragrance and pleasant odour
8.	TURMARIC POWDER	*Curcuma longa*	Natural antibiotic, anti-inflammatory, anti-fungal, prevents skin from various infections
	EXTRACT		and also lighten skin color and increases skin health
9.	XANTHUMGUM	*Xanthomonuscompestres*	Naturally occurring non-toxic stabilizer andthickener
10.	METHYL PARABEN	-	Preservative
11.	PROPYL PARABEN	-	Preservative
12.	SODIUM LAURYL SULPHATE	-	Surfactant
13.	ROSE WATER	*Rosa*	Anti-bacterial, antiseptic properties whichcures the acne and also provide soothing effect
14.	GRAPES PULP	*Vitis*	Uv protective, rich in antioxidants, rejuvenates skin
15.	CHANDAN	*Santalum album*	Sun protective, cure dry skin, anti-aging, natural exfoliator

Other ingredients were also added to increase the stability, efficiency, and compliance forapplication.

NEEM LEAVES- *Azadirachta indica*, commonly known as neem, nimtree or Indianlilac, is a tree in the mahogany
Family Meliaceae. It is one of two species in thegenus *Azadirachta*, And is native to the Indian subcontinent,
i.e. India, Nepal, Pakistan, Bangladesh, Sri Lanka,and Maldives. It is typically grown
In tropical and semi-tropical regions. Neem trees also grow in island Located in the southernpart of Iran. Its fruits and seeds are the source of neem oil.

Uses- Neem leaf is used for leprosy, eye disorders, bloody nose, intestinal worms, stomach upset, loss of appetite, skin ulcers, diseases of the heart and blood vessels (cardiovascular disease), fever, diabetes, gum disease (gingivitis), and liver problems. The leaf is also used for birth control and to cause abortions.

- **ROSE-**A rose is a woody perennial floweringplant of the genus *Rosa*, in the family Rosaceae,or the flower it bears. There are over threehundred species and thousands of cultivars. They form a group of plants that can be erect Shrubs, climbing, or trailing, with stems that are often armed With sharp prickles. Flowers vary in size and shape and are usually large and showy, in colours ranging from white through yellows and reds.

Most species are native to Asia, with smaller numbers native to Europe, North America, and northwestern Africa Species, cultivars and hybrids are all widely grown for their beauty and often are fragrant. Roses have acquired cultural significance in many societies. Rose plants range in size from compact, miniature roses, to climbers that can reach seven meters in height. Different species hybridize easily, and this has been used in the development of the wide range of garden roses.
Uses - Rose perfumes are made from rose oil (also called attar of roses), which is a mixture of volatile essential oils obtained by steam distilling the crushed petals of roses. An associated product is rose water which is used for cooking, cosmetics, medicine and religious practices.

- **LEMON-** The lemon, *Citrus limon* (L.) Osbeck, is a species of small evergreen tree in the flowering plant Family Rutaceae, nativeto South Asia, primarily North eastern India.The tree's ellipsoidal yellow fruit is used for culinaryand non-culinary purposes throughout

The world, primarily for its juice, which has both culinary and cleaning uses. The pulp and rind (zest) are also used in cooking and baking. The juice of the lemon is about 5% to 6% citric acid, with a pH of around 2.2, giving it a sour taste. The distinctive sour taste of lemon juice makes it a key ingredient in drinks and foods suchas lemonade and lemon meringue pie.
Uses - Lemon peel contains a list of vitamin, mineral and fibre like calcium, potassium and Vitamin C, which gives your body a nutritional boost. Lemon peels also have some healthy enzymes, which help us to live a healthier life.

- ORANGE PEEL:- The orange is the fruit of the citrus species *Citrus sinensis* in the family Rutaceae. It is also called sweet orange, to distinguish it from the related *Citrusaurantium*, referred to as bitter orange.
The sweet orange reproduces asexually; varieties of sweet orange a
Uses - Oranges have a high content of citric acid which aids in s
improving the overall look of your skin. Orange peel has a higher co
grind orange peel and use as a body scrub in your daily beauty regim

TURMARIC- Curcuma longa of the ginger family, Zingiberaceae, the roots of which are used in cooking. The plant is a perennial, rhizomatous, herbaceous plant native to the Indian subcontinent and Southeast Asia, that requires temperatures between 20 and 30 °C (68 And 86 °F) and a considerableamount of annual rainfall to thrive. Plants are gathered each year for their rhizomes, some for propagation in the following season and some for consumption. The rhizomes are used fresh or boiled in water and dried, after which they are ground intoa deep orange-yellow powder commonly used as a coloring and flavoring agent in many Asian cuisines, especially for curries, as well as for dyeing. Turmeric powder has a warm, bitter, black pepper-like flavor and earthy, mustard-like aroma. Although long used in Ayurvedic medicine, where it is also known as *haridra*, no high- quality clinical evidence exists for use of turmeric or its constituent, curcumin, as a therapy.
Uses- its anti-inflammatory and antibacterial benefits, turmeric can work wonders on condition-riddled skin. It can also help reduce redness from blemishes and calm skin conditions like eczema and rosacea. Turmeric is excellent for acne because it is a natural antiseptic and helps to keep bacteria from spreading.

- **XANTHUM GUM**- It is a polysaccharide with many industrial uses, including asa common food additive. It is an effective thickening agent and stabilizer to prevent ingredients from separating. It can be produced from simple sugars using a fermentation process, and derives its name from the species of bacteria used, *Xanthomonas campestris*.

Uses- Xanthan gum, 1%, can produce a significant increase in the viscosity of liquid. In foods, xanthan gum is common in salad dressings and sauces. It helps to prevent oilseparation by stabilizing the emulsion, although it is not an emulsifier. Xanthan gum also helps suspend solid particles, such as spices. Xanthan gum helps create the desired texture in many ice creams. Toothpaste often contains xanthan gum as a binder to keep the product uniform.

- **GRAPES**- A grape is a fruit, botanically a berry, of the deciduous woody vines of the flowering plant genus *Vitis* Grapes can be eaten fresh as table grapes or they can be used for making wine, jam, juice, jelly, grape seed extract, raisins, vinegar, and grape seed oil. Grapes are a non- climacteric type of fruit, generally occurring in clusters.

Uses - Rejuvenates the Skin. Filled with Vitamin C and antioxidants, grapes can help to revitalize your skin. In fact, they can even protect your skin from cancer-causing ultraviolet radiation and free radicals that can, on a lesser scale, cause wrinkles and dark spots.

- **SANDALWOOD**- It is a class of woods from trees in the genus *Santalum*. The woods are heavy, yellow, andfine-grained unlike many other aromatic woods, they retain their fragrance for decades. Sandalwood oil is extracted from the woods for use. Sandalwood is thesecond-most expensive wood in the world, after African

Blackwood. Both the wood and the oil produce a distinctive fragrance that has been highly valued for centuries. Consequently, species of these slow-growing trees have suffered overharvesting in past centuries.

Uses - Sandalwood powder has long been used for skin problems and with good reason. Regular use of this antibacterial powder can fight acne-causing bacteria, exfoliate the skin, soothe sunburn, remove suntan, and reduce signs of aging likedry skin and wrinkles.

- **ALOEVERA**- is a succulent plant species of the genus *Aloe*. An evergreen perennial, it originates from the Arabian Peninsula but grows wild in tropical climates around the world and is cultivated foragricultural and medicinal uses. The species is also used for decorative purposes and grows successfully indoors as a potted plant. It is found in many consumer products including beverages, skin lotion,cosmetics, or ointments for minor burns and sunburns. There is little scientific evidence of the effectiveness or safety of *Aloe vera* extracts for either cosmetic or medicinal purposes. Studies finding positive evidence are frequently contradicted by other studies.

USES-It provides a protective layer to the skin which helps retain moisture. Aloe isalso rich in antioxidants and minerals which can help speed healing. In one study, it was found that Aloe Vera gel displayed some anti-inflammatory effects superior to those of 1% hydrocortisone when applied over a 48-hour period.

- **LIQUORICE**-the root of *Glycyrrhiza glabra* from which a sweet flavour can be extracted. The liquorice plant is a herbaceousperennial legume native to the Middle East,

southern Europe, and parts of Asia, such as India. It is not botanically relatedto anise, star anise, or fennel, which are sources of similar flavouring compounds. Liquorice flavours are used as candies or sweeteners, particularly in some European and Middle Eastern countries.

USES-may also help diminish the appearance of dark under-eye circles, discolorationand age spots. The extract

also has powerful antioxidants that help protect the skin from environmental stressors, as well as "licochalcone," which helps balanceoil, making this a good ingredient for those with oily Dona Debbarma, PK Moharana et al. (2015) conducted a study to evaluate the dermal safety and post-application feel of Deep Cleansing Apricot Scrub in 10 volunteers. Volunteers were instructed to apply Deep Cleansing Apricot Scrub on the face twice a week for a period of 2 weeks. They were advised to apply the scrub on their wet face and gently massage with scrubbing in circular motion followed by wash with water. The volunteers were reviewed at initially at baseline, 1 week, and at2 weeks visits post application to evaluate the dermal safety parameters, which included signs and symptoms such as erythema, edema, pain, pruritus and urticaria. Post-application effect of the product was evaluated using parameters such as cleansing effect, reduction in acne recurrence, and improvement in skin complexion. This study indicates that the Deep Cleansing Apricot Scrub is safe and efficacious. It deepcleanses the skin by removing superficial dead skin cells and blackheads. No side effects observed in the study.[25]

- Sanghi D.K and TiwleRakesh Tiwle (2016) Skin disease is very common and theneed to prevent or treat the disease is in great demand. In the present scenario, people need remedy for skin disease without side effects .Herbal ingredients opened the way to formulate cosmetics without harmful effect, which can impart the required properties to heal the skin disease and the expense will be less when compared with the synthetic products. This formulation can be used as an effective face wash gel. Natural remedies are more acceptable in the belief that they are safer with fewer side effects than the synthetic
- ones. Herbal formulations have growing demand in the world market. It is a verygood attempt to establish the herbal face wash containing aqueous extracts of neem leaves, turmeric rhizomes, liquorice root, and seed of nutmeg.[26]

- Jadhav Jangalrao Priyanka et al. (2016) Their present work deals with the development & evaluation of the herbal anti-acne face wash containing extract of Manjishtha (Rubiacordifolia), Sariva (Hemidermusindicus), Vacha (Acoruscalamus), Lodhara (Symplocasrecemesa), and Raktachandan (Pterocarpusantalinus). Although various topical herbal formulations for acne are available in the market, we propose tomake poly herbal formulation using different herbal & synthetic ingredient. Theplants have been reported in literature having good anti-microbial, anti-oxidant & anti-inflammatory activity. Various formulation batches i.e., F1 to F6 were prepared using polymers in varied concentrations. Prepared formulations (F1 to F6) were evaluated for various parameters like colour, appearance, consistency, washability, pH & spreadability. Amongst all the formulation studies batch F5 was found optimumfor all the parameter. It was very good attempt to establish the herbal anti-acne face wash containing extract of Manjishtha, Sariva, Vacha, Lodhara, Raktachandan.[27]

- Polyherbal exfoliant was prepared and evaluated. It contains ethanolic extract of kiwi fruit and almond which possess antioxidant, antiaging, and skin lightening property. Italso contains coffee bean powder acting as a mild abrasive agent in the formulation which additionally has anti-inflammatory activity. Apart from these, diatom is a natural exfoliating agent derived from marine phytoplankton gently soothes the skin surface by releasing dead cell and pore blocking impurities. They can exfoliate the skin without scratching the skin surface by applying pressure on them. Suitable base materials such as gelling agent, preservative, neutralizer, and foaming agent were selected and incorporated into the extract to design a suitable herbal gel. Evaluation parameters such as color, odor, consistency, and pH were checked. The formulation was found to be slightly alkaline which is compatible with skin, easily spreadable, andnon-irritant to the skin.[28]

Objective –

- The objective of the study is to formulate an herbal gel face wash with scrub usingnatural ingredients.
- The skin care products are basic need to maintain beauty which improvesindividuals confident rapidly.
- Skin acts as the reflection as health of an individual and its being a important partof whole body, as skin can be effected by various environmental and other physiological factor such as-climatic changes, UV rays, pollution, dust, hormonaldisturbances, stress, medication therapy, upset stomach, lifestyles, habitat, food habits etc.

EVALUATION OF FORMULATION-
PHYSICAL EVALUATION

1. Washability
2. PH
3. Spreadibility
4. Foamibility test

5. Grittiness
6. Irritancy test

II. CONCLUSION

The attempted work done to make an herbal gel face wash with scrub using suitable ingredients. Since, the dates were used as the main ingredient used as scrubber, whichwere incorporated in the gel base to increase the activity and efficiency of the product.Thus, various parameters were evaluated providing satisfactory results and improve skin health without any side effect

REFERENCE

[1]. Dona Debbarma, PK Moharana et al. Clinical Review of Deep Cleansing Apricot Scrub: An Herbal Formulation. International Journals of Bioassay; ISSN: 2278-778X 2015.
[2]. Sanghi D.K and Tiwle Rakesh Tiwle. Formulation and Characteristics of Herbal Face Wash/Scrubber. European Journal of Pharmaceutical and Medical Research. 2016, 3(11), 274-278 2016.
[3]. Jadhav Jangalrao Priyanka et al. Formulation & Evaluation of Poly-Herbal Anti-Acne Face Wash Gel. World Journal of Pharmaceutical Research. Volume 5, Issue 7, 1184- 1190; 2016.
[4]. Grace Fatima et al. Preparation and Evaluation of Deep Cleansing Exfoliator. Asian J Pharm Clin Res, Vol 11, Issue 7, 2018, 356-359.
[5]. FORMULATION AND CHARACTERIZATION OF HERBAL FACE WASH/SCRUBER 1D. K. Sanghi and *Rakesh Tiwle 1Principal of Shri Laxmanrao Mankar Institute of Pharmacy, Amgoan, Gondia, Maharashtra, India- 441902.
[6]. Sowmya K.V., Darsika C.X., Grace F., Shanmuganathan S.,2015 "Formulation & Evaluation of Poly-herbal Face wash gel", World Journal of Pharmacy & Pharmaceutical sciences, 4(6): 585-588.
[7]. Ashawat MS., Banchhor M., "Herbal Cosmetics, 2009 "Trends in skin care formulation" Pharmacognosy Rev., 3(5): 82-89.
[8]. Kanlayavattanakul M., Lourith N., 2011 "Therapeutic agents & herbs in topical applications for acne treatment", International Journal of cosmetic Science, 33: 289- 297.
[9]. Turakhiya Jignesh M, Savani Hitesh D, Patel Jainish M, Akbari Bhavesh V, Prajapati Neha G, Shah Vyoma S. 2013, "A review superporous hydrogel (SPH) – an approach for controlled drug delivery. Univ J Pharm: 2(1):47–58.
[10]. Yilmaz H, Yavuz O (1999) Content of some trace metals in honey from south-eastern Anatolia.Food Chem, 65 :475– 476
[11]. Wadi M; Al-Amin H; Farouq A; Kashef H; Khaled S A (1987) Sudanese bee honey inthe treatment of suppurating wounds. Arab Medico, 3: 16-8.
[12]. Baby, A. R., Zague, V., Maciel, C.P.M., Kaneko, T. M., Consiglieri, V. O., Velasco and M. V. R, (2004). Development of Cosmetic Mask Formulations. Rev Bras Cienc. Farm Ahmed, S.A. and M. Grainage, 1985. Use of indigenous plant resources in rural development, potential of neem tree. Int. J. Dev. Technol., 3: 123-130.
[13]. Joshi, P.C. and O. Prakash, 1992. Allelopathic effects of litter extract of some tree species on germination and seedling growth of agricultural crops. Proceedings of the 1st National Symposium on Allelopathy in Agroecosystem, (NSAA'92), Indian Society of Alleolopathy, Hisar, India, pp: 127-128.
[14]. Quddus, M.A., 2001. The cropland agroforestry experiences of the village and farm forestry project in Northwest Bangladesh. Proceedings of the National Workshop, September 16-17, 2001, Gazipur, Bangladesh, pp: 229-239.
[15]. Rho, B.J. and B.S. Kil, 1986. Influence of phytotoxin from *Pinus rigida* on the selected Plants. J. Nat. Sci. Wankwang Univ., 5: 19-27
[16]. Zackrisson, O. and M.C. Nilsson, 1992. Allelopathic effects by *Empetrum hermaphroditum* on seed germination of two boreal tree species. Can. J. For. Res., 22:44-56.
[17]. Fallah, A., V.M. Ghalavand and R. Khajepour, 2006. Effects of blending method of livestock compost with soil and mixing it with chemical compost on yield and parts ofyield of seed corn in Khorramabad. Lorestan Agric. Nat. Resour. Sci. Magaz., 40: 233-242.
[18]. Maheswarappa, H.P., H.V. Nanjappa and M.R. Hegde, 1999. Influence of organic manures on yield of arrowroot, soil physico-chemical and biological properties when grown as intercrop in coconut garden. Ann. Agric. Res., 20: 318-323.
[19]. Vadiraj, B.A., Siddagangaiah and S.N. Potty, 1998. Response of coriander (*Coriandrum sativum* L.) cultivars to graded levels of vermicompost. J. Spices Aromatic Crops, 7: 141-143.
[20]. Barrantes, E. and M. Guinea, 2003. Inhibition of collagenase and metalloproteinases by aloins and aloe gel. Life Sci., 72: 843-850.
[21]. Sowmya K.V., Darsika C.X., Grace F., Shanmuganathan S. Formulation &Evaluation of Poly-herbal Face washes gel. *World Journal of Pharmacy & Pharmaceutical Sciences*, 2015; 4(6): 585-588.
[22]. Ashawat MS, Banchhor M. Herbal Cosmetics. Trends in skin care formulation.
[23]. *Pharmacognosy Rev* 2009; (5): 82-89.
[24]. Singh H.P., Samnhotra N., Gullaiya S., Kaur I. Anti-acne synergistic Herbal face wash gel Formulation Evaluation, & Stability study, *World Journal of Pharmaceutical Research*, 2015;4(9): 1261-1273.
[25]. Kanlayavattanakul M., Lourith N., Therapeutic agents & herbs in topical applicationsfor acne treatment, *International Journal of cosmetic Science*, 2011; 33: 289-297.
[26]. Kapoor V.P., Joshi H., Chaubey M., Applications of seed gums in pharmaceutical formulations, *J Med Arom Plant Sci*. 2000; 22/4A & 23/1A: 42-44.