

Review on Herbal Face Cream

Mr. Ohol John Michael, Prof. Mr. Shankar Chavan, Dr. Bhosale Mahesh P.

Dharmaraj Shaikshanik Pratishthan College of Pharmacy, Walki, Ahilyanagar

Abstract: *Cosmetics are products that are applied to the body to clean, protect, or change the appearance of the skin, hair, nails, lips, eyes, or teeth. They can be natural or synthetic, and include products like lotions, powders, lipsticks, perfumes, colognes, shampoos, and dental products*

Keywords: *Cosmetics*

I. INTRODUCTION

Cosmetic: Cosmetics are products that are applied to the body to clean, protect, or change the appearance of the skin, hair, nails, lips, eyes, or teeth. They can be natural or synthetic, and include products like lotions, powders, lipsticks, perfumes, colognes, shampoos, and dental products.

Herbal cosmetics: The Demand of herbal cosmetics due to the availability of new ingredients the financial rewards for developing successful products and maintained of quality standard. Cosmetics are the products applying on the body. Face cream are used as cosmetic for softening and cleansing action.

Herbal cosmetics are safe because they are natural. Provides protection against degenerative skin conditions. Improve appearance by delivering nutrients necessary for healthy skin.

Cream is a preparation used for the application to the skin. Creams are also applied to the mucus membrane such as vagina, rectum. Creams may be considered as pharmaceutical products and cosmetics used in variety of skin conditions. The demand of cosmetics due to the availability of herbal cosmetics is increasing predominantly. Herbal formulations are receiving more concentration in public because of their high-quality properties and less side effects. Additionally, it also provides the skin with necessary nutrients and required moisture.

The herbal cream is basically water in oil type of emulsion. The natural ingredients are chosen for preparation of herbal cream. The choice of these ingredients is based on their individual properties. Aloe-vera is used as a moisturizer and anti-acne agent. There are different types of creams like cleansing, cold, foundation, vanishing, night, massage, hand and body creams.

The main aim of our work is to develop a herbal cream which can give multipurpose effect, like moisturizer, reduce acne and skin irritation, reduce skin diseases like eczema, psoriasis, dry skin, wrinkles, rashes etc. and also adding glow to the face.

Ideal properties of face cream :- * They are easy to apply.

* They spread easily on the skin.

* They are pleasant in appearance.

* They cause less irritation to the skin.

* They should melt or liquefy.

* They should produce flushing action on skin and it's pore openings.

* They should form an emollient film on the skin after application.

* They should not make dry skin which happens in case, when the skin is washed with water or soap

* They also help in softening, lubricating and protecting skin apart from cleansing purposes.





FIG NO .01 : Herbal cream

Classification of Creams:

Types of creams according to function, characteristic properties and type of emulsion:

1. Make-up cream (o/w emulsion): a) Vanishing cream
b) Foundation creams.
2. Cleansing cream, cleansing milk, cleansing lotion (w/o emulsion)
3. Winter cream (w/o emulsion): Cold cream or moisturizing creams.
4. All-purpose cream and general creams.
5. Night cream and massage creams.
6. Skin protective cream.
7. Hand and body creams.

Advantages of Herbal Cosmetics:

1. Do not show allergic reactions
2. Easily penetrate skin and hair follicles
3. Very effective in small quantity as compared to synthetic cosmetics
4. Easily available, found in large variety & quantity.

Disadvantages of Herbal Cosmetics:

1. Requires long term therapy due to slower effects
2. Difficult to mask odor & taste.
3. Time consuming and complicated manufacturing process.
4. No Pharmacopoeia defines composition of any herbal cosmetics

II. LITERATURE REVIEW

1. Muggu Shankar Bhavani , CH.Naveena ,...et al , 2023

Hindu college of pharmacy , Amaravati road , Guntur , Andhra Pradesh , India Research article gives the present study was point out with the object of preparing the herbal face cream that improves the skin moisture , emollient and nourishment for the skin . evaluated for various evaluation parameter such as physical properties , determination of PH, spreadability, washability , phase separation , stability test .

2. Chandrashekhar B.Badwaik, Updesh B.Lade ,....et al , 2022

Formulation and Evaluation of herbal face cream . International Journal of Pharmaceutical Research and Application volume 7 issue 1 page no 955-960 .

This article gives an formula for the preparation of herbal face cream . Evaluation parameter for the herbal face cream such as phase separation , Ph determination , non irritancy test , washability , consistency , spreadability and physical evaluation .

3. S. Valarmati , M. Senthil Kumaret al,2020

Reseach Journal of Pharmacy and Technology volume-13 , issue -1 year -2020. Face cream are semisolid preparation used for improving the complexion of the face . The main aim of this research article is to prepare the face cream using different herbs and prepared face cream are evaluated for the efficacy.



4. Ram Kumar Sahu , Amit Roy ,....et al , 2012

Formulation and development of face cream containing natural products . Research Journal of Topical and Cosmetic Sciences , volume -3 , issue -1 . year -2012 . the aim of present study was to formulation and evaluation of face cream comprising extract of natural products such also vera extracts , cucumber peel extracts , and amla extracts . The evaluation of all prepared base were done on different parameter like PH , spreadability , stability and phase separation were examined .

5. Mr. Piyush Bachhav , Rushikesh Bachhav ,....et al

Formulation and Evaluation of Herbal Face Cream . Open Access Journal of Pharmaceutical Research , volume 8 , issue 1 . Herbal cosmetics are the preparation used to enhance each persons look . The cream is made with many crude drugs such as liquid paraffin , aloe vera leaves , bees wax , etc . The current study set out to create an herbal cream that may be used to nourish , moisturize , and treat a variety of skin conditions . prepared formulation was evaluated for various parameter like colour , appearance , consistency , ph and consumer acceptance .

6. Puja saha , Supriyo das,...et al 2021

Now every day in cosmetic formulations, herbal extracts are wont to improve beauty and attractiveness. Herbal cosmetics are categorized according to the dosage type, like cream, powder, soaps, and solutions and according to the component or organ of the body to be used, like hair, skin, nail, mouth, and teeth cosmetics. Creams are semisolid emulsions meant to be applied to the mucosa or skin. This softens the skin leaving nothing

7. Mr.Nitin F.Vanarase, Ms.Bhavana Tambe , .. et al 2023

International Journal of Pharmaceutical Research and Applications Volume 8, Issue 2 MarApr 2023, pp: 514-518. Herbal cosmetics are the preparation used to enhance the human appearance .The main Aim of our work is to develop an herbal cream which can give multipurpose effect like moisturizer, reduce acne and skin irritation.

8. Saurabh Rajesh Kamble and Waghmode Ganesh Mahadev ,....et al 2023

Aloe vera. amla and cucumber peel are medicinal plant they are used as traditionally from ancient year in various herbal medicines such Ayurveda, siddha, and Homeopathic. International Journal of Creative Research Thoughts (IJCRT) Volume 11, Issue 6 June.

AIM AND OBJECTIVE

AIM:- Formulation and Evaluation Of Herbal Face Cream

OBJECTIVE

- 1) To develop a herbal cream which can give multipurpose effect, like moisturizer, reduce acne and skin irritation, reduce skin diseases like eczema, psoriasis, dry skin, wrinkles, rashes etc. and also adding glow to the face.
- 2) To reduce side effects .
- 3) Skin nourishment .
- 4) To evaluate phase separation.
- 5) To prepare herbal cream .
- 6) To enhance cream stability .
- 7) To develop an variety of face cream .
- 8) To reduce skin irritation .
- 9) To check pH and microbial growth in prepare herbal face cream .

Material (PLANT PROFILE)

AMLA

Amla, also known as Indian gooseberry, is a tropical plant that is native to Southeast Asia and is widely cultivated in India and nearby countries.



The tree is small to medium in size, reaching 1–8 metres (3+1/2–26 feet) in height. The bark is mottled. The branchlets are finely pubescent (not glabrous), 10–20 centimetres (4– 8 inches) long, usually deciduous. The leaves are simple, subsessile and closely set along branchlets, light green, resembling pinnate leaves. The flowers are greenish–yellow. The fruit is nearly spherical, light greenish–yellow, quite smooth and hard on appearance, with six vertical stripes or furrows. The fruit is up to 26 millimetres (1 in) in diameter, and, while the fruit of wild plants weigh approximately 5.5 grams (0.2 ounces), cultivated fruits average 28.4 g to 56 g.



FIG NO 02:- Amla

Benefits of Amla: -

- Treats Acne. Amla helps remove acne scars.
- Brightens Complexion.
- Reduces Skin Pigmentation.
- Anti-ageing Powerhouse.
- Prevents Dandruff & Itchiness on the Scalp.
- Exfoliates the Skin Gently.

Synonym:- Amlang (Ar.), Amlaki (Or.)

Biological Source:- This is consisting of dried , as well as fresh fruits pericarp of the plant *Emblica officinalis* Gaertn. *Phyllanthus emblica* Linn. Belonging to family Euphobiaceae. It contains not less than 1.0% w/w of Gallic acid calculated on dry basis.

Organoleptic properties :-

- Colour : The green colour changes to light yellow or brick red in maturity
- Odour : Odourless

Chemical Constituents:

Emblcanin A and B, Punigluconin, Pedunculagin, Chebulinic acid (Ellagitannin), Phyllantine, Gallic acid Proline, Alanine, Pectine, Ascorbic acid, Citric acid.

Uses:- Fresh amla:- These are available in season in Indian stores. You can eat amla slices raw with salt and spices, like in India or you can mix a teaspoon of honey, Honey balance the tart taste of amla.

Amla oil: This oil helps to strengthen the hair, prevents premature graying and stop hair fall.

Aloe Vera Powder

Aloe is a cactus-like plant that grows in hot, dry climates. It is cultivated in subtropical regions around the world, including the southern border areas of Texas, New Mexico, Arizona, and California. Historically, aloe has been used for skin conditions and was thought to improve baldness and promote wound healing. Aloe is used topically (applied to the skin) and orally. Topical use of aloe is promoted for acne, lichen planus (a very itchy rash on the skin or in the mouth), oral submucous fibrosis, burning mouth syndrome, burns, and radiation-induced skin toxicity. Oral use of aloe is promoted



for weight loss, diabetes, hepatitis, and inflammatory bowel disease (a group of conditions caused by gut inflammation that includes Crohn's disease and ulcerative .

Benefits of Aloe vera:-

- Its anti-inflammatory properties can reduce pain, swelling, and soreness of wounds or injuries
- It has a cooling effect on rashes or sunburns
- It supports the production and release of collagen
- Help in keeping your face health and gives you a natural shine
- Aloe-vera is rich in moisturizing properties it helps in removing dead cells
- Prevent or reduce wrinkles and dark spots of your face
- Moisturizes dry skin
- Soothes irritated skin
- Remove sign of ageing
- Fights acne and blemishes
- Remove dark circles and puffiness
- Relieves eczema and psoriasis
- Eliminates dead skin cells
- Treat sunburn
- Bring a natural glow to the skin
- Hydrated the skin with essential
- Prevents premature aging

Synonym :- Aloe barbadensis

Biological Source: - aloes is obtained from the dried juice of the leaves of aloe barbadensis miller

Organoleptic properties: -

- Colour:- slightly yellow or translucent
- Odour: - odourless

Chemical constituents: - Lupeol, Salicylic Acid, Urea, Nitrogen, Cinnamonic Acid, Phenols and Sulfer

Uses:-

- helps an itchy clap
- Soothes burns and heals wounds



FIG NO 03: - Alov vera.



Cucumber

The cucumber (*Cucumis sativus*) is a widely-cultivated creeping vine plant in the family Cucurbitaceae that bears cylindrical to spherical fruits, which are used as culinary vegetables. Considered an annual plant, there are three main types of cucumber—slicing, pickling, and seedless—within which several cultivars have been created. The cucumber originates in Asia extending from India, Nepal, Bangladesh, China (Yunnan, Guizhou, Guangxi), and Northern Thailand, but now grows on most continents, and many different types of cucumber are grown commercially and traded on the global market. In North America, the term wild cucumber refers to plants in the genera *Echinocystis* and *Marah*, though the two are not closely related.

Benefits of cucumber

- Hydrates Your Skin. Skin hydration is the key to keeping your skin healthy and happy.
- Reduces Skin Inflammation.
- Treats Sunburn.
- Prevents Acne.
- Fights Against Free Radicals.
- Promotes Skin Brightness.
- Prevents Premature Ageing.
- Cucumber Toner for Oily Skin.

Synonyms: - cucumber vine.veg.*Cucumis sativus*

Biological source :- Cucumber is an annual climbing herbaceous plant. The root system is shallow and mainly distributes in the cultivated land layer of 30 cm. The stem is vine with different degree of apical dominance. The cross section of the stem is rhombus, and the epidermis of the stem has burrs

Organoleptic properties:

Color: - Green Odour: Pleasant

Chemical constituents:- *sativus* L, according to one source, are vitamins, minerals, amino acids, phytosterols, phenolic acids, fatty acids, and cucurbitacins. According to another source, traces of essential oil, amino acids, pectins, starch, sugars, vitamin C, and curcubitacin are found in cucumbers.⁵ Glycosides, steroids, flavonoids, carbohydrates, terpenoids, and tannins were identified in an aqueous extract of the cucumber fruit.⁶

Uses:

Cucumber is filled with many essential nutrients, minerals, and antioxidants, which is why it helps with clogged and visibly enlarged pores, excessive oils, and dryness. In addition, it is rich in water content which boosts hydration levels in the skin and thus, gives a naturally glowing complexion.



FIG NO 04: - Cucumber

DOI: 10.48175/568



Bees wax

Beeswax has fantastic skin-softening properties and enhances skin elasticity, helping reduce the signs of ageing. Beeswax is anti-allergenic, anti-inflammatory, anti-oxidant, anti-bacterial and germicidal. These properties make beeswax a highly stable base ingredient, thus extending the product's life.



Fig no :- 05

White soft paraffin

White Soft Paraffin is a homogenous mixtures of oily & waxy long chain, non-polar hydrocarbons, odourless & tasteless, colour is white. White Soft Paraffin is available in different consistencies & shear strength.



Fig no :- 06

Methyl Paraben

Methylparaben is a 4-hydroxybenzoate ester resulting from the formal condensation of the carboxy group of 4-hydroxybenzoic acid with methanol. It is the most frequently used antimicrobial preservative in cosmetics. It occurs naturally in several fruits, particularly in blueberries.



Fig no :- 07



METHODS

Plant materials: The proposed study of Aloe vera, Amla. Cucumber peel Collected from the local area.

Preparation of Extract: Air dried and coarsely powdered of Aloe vera, Amla and cucumber peel Were placed in Soxhlet separately, using petroleum ether and then successively with Ethanol. The extract was then concentrated to dryness under reduced pressure and controlled Temperature, and they were preserved in a Refrigerator.

Cream Formulation: Beeswax, propylene glycol was taken in first beaker. Then heat on a water bath for uniform mixing. After few minutes oil phase was formed. Aloe vera extract and Amla extract, cucumber peel extract, Distilled water, white soft paraffin and glycerine,, zinc oxide, Sodium benzoate was taken in second beaker. Mixing all the ingredients by heating on a water bath, the aqueous phase was formed. Oil phase was added into aqueous phase

SR.NO	INGREDIENTS	QUANTITY (20gm)
1	Aloe vera	1.5 gm
2	Amla	1 gm
3	Cucumber Peels	0.8 gm
4	Bees Wax	3.2 gm
5	White Soft Paraffin	9 ml
6	Methyl Paraben	0.3 ml
7	Distilled Water	q.s
8	Menthol	0.2 ml
9	Glycerine	1 ml
10	Glycerine Propylene Glycol	1 ml
11	Zic Oxide	0.7 gm
12	Sodium Benzoate	0.1 ml

TABLE NO 01 :- Formula of cream formulation

ROLE OF INGREDIENTS

SR.NO	INGREDIENTS	ROLE
1	Amla	Skin appear soft
2	Aloe vera	Moisturize skin
3	Cucumber	Excessive oils

TABLE NO 02: Role of Ingredients

METHOD

1. Beeswax, propylene glycol was taken in first beaker .
2. Then heat on a water bath for uniform mixing. After few minutes oil phase was formed.
3. Aloe vera extract and Amla extract ,Cucumber peel extract, Distilled water, white soft paraffin and glycerine, zinc oxide, Sodium benzoate was taken in second beaker.
4. Mixing all the ingredients by heating on a water bath, the aqueous phase was formed . Oil phase was added into aqueous phase

EXPERIMENTAL WORK

PROCEDURE: -

- 1)The plant extracts were mixed in different proportion.
- 2) Beeswax, propylene glycol was taken in first beaker. Then heat on a water bath for uniform mixing.



METHOD

Beeswax, propylene glycol was taken in first beaker .

Then heat on a water bath for uniform mixing. After few minutes oil phase was formed.

Aloe vera extract and Amla extract ,Cucumber peel extract, Distilled water, white soft paraffin and glycerine,, zinc oxide, Sodium benzoate was taken in second beaker.

Mixing all the ingredients by heating on a water bath, the aqueous phase was formed . Oil phase was added into aqueous phase

EXPERIMENTAL WORK

PROCEDURE

The plant extracts were mixed in different proportion.

Beeswax, propylene glycol was taken in first beaker.

Then heat on a water bath for uniform mixing.

After few mi

nutes oil phase was formed.

Aloe vera extract and Amla extract, cucumber peel extract, Distilled water, white soft paraffin and glycerine,, zinc oxide, Sodium benzoate was taken in second beaker. Mixing all the ingredients by heating on a water bath , the aqueous phase was formed . oil phase was added into aqueous phase

EVALUATION PARAMETER OF FORMULATED CREAM

EVALUATION OF CREAM

Evaluation of herbal cream was following

PHYSICAL EVALUATION

Formulated herbal creams was further Evaluated by using the following physical parameter physical parameter colour, odour, consistency , and state of the formulation

a) Colour: The colour of the cream was observed by visual examination. The result was shows in table 2.

b) Odour: The odour of cream was found to be characteristics.

c) State: The state was cream was examined visually. The cream was solid in state result was shows in table 2.

d) Consistency: The formulation was examined by rubbing cream on hand manually. The cream having smooth consistency.

SPREDABILITY: spread ability of formulated cream was measured by placing sample in between two slides then compressed to uniform thickness by placing a definite weight for defined time. The specified time required to separate the two slides was measured as Spredability. Lesser Spredability was calculated by the following formula.

Spread ability(S) = Weight tide to upper slide (W) x Length of glass slide (L) / Time taken to separate slide (T)



FIG NO 08 :- Spreadability



NON- IRRITANCY TEST: Herbal cream formulation was evaluated for the non- irritancy test. Preparation shown no redness and irritancy. Observation of the state was done for 24 h 28 results was shown in table

WASHABILITY: Formulation was applied on the skin and then ease extends of washing with water was checked.

PHASE SEPARATION : The prepared cream was transferred in a suitable wide mouth container. Set aside for storage the oil phase and aqueous phase separation were visualizing after 24h.

STABILITY TEST : To assess the formulation stability, the stability studies were done. Each formulation was stored at 4°C room temperature and 40°C temperature for a month and observed for physical stability like colour. No separation occurs so it is found to be stable.

TEST FOR MICROBIAL GROWTH IN FORMULATED CREAM: The Formulated Cream is inoculated on the plate of agar media by streak plate method and a control was prepared by excluding the cream. The plate is placed into the incubator and is incubated at 37°C for 24 hours. After the incubation period, plate was taken out and checked for the microbial growth by comparing it with the control.

pH DETERMINATION : Take 0.5 g of cream and dispersed it in 50 ml distilled water. Then check it's pH by using digital pH meter .



Fig no 09 :- pH meter

OBSERVATION TABLES

SR.NO	PARAMETER	RESULTS
1	Colour	White green
2	Odour	Characteristics
3	State	Semisolid
4	Consistency	Smooth
5	Spredability	7.4 g.cm/cm
6	Wash ability	Easy washable
7	Non irritancy	Non irritant
8	Phase Separation	No phase separation
9	Stability test	No separation occurs
10	Test for microbial growth in formulated Cream	Absence
11	pH	6.2

Table No 02 :- Observation table

Result and Discussion



RESULT AND DISSCUSION

Sr .no	Parameters	Prepared formulation result	Standard formulation result
1	Physical appearance	-	-
	a) colour	Brownish	Brownish
	b) Odour	Pleasant	Pleasant
2	Texture	Gritty	Smooth
3	% Solid content	8.20%	10.5%
4	Consistency	Smooth	Smooth, Semi- solid
5	Spreadability	7.4 g.cm/cm	7.9 g. cm/cm
6	Washability	Easy washable	Easy washable
7	Non-irritancy	Non irritant	Non irritant
8	Phase separation	No phase separation	No phase separation
9	Stability test	No separation occurs	No separation occurs
10	pH	6.2	5.9-6.9

RESULT

The present research was the formulation and evaluation of polyherbal cream. The evaluation parameters were coming under results, the physical evaluation of polyherbal cream, PH of the cream, Spreadability, Washability, non- irritancy test, viscosity and phase separation of the polyherbal pain reliving cream was shown in table . Also microbial test for prepared herbal face cream done . prepared herbal face cream are compared with standard marketed cream by evaluation.

DISSCUSION

The present work was the formulation and evaluation of polyherbal cream. This cream formulation was o/w type of emulsion; hence this formulation was easily washed with plane water after application. The prepared formulation was good Spreadability. Viscosity and PH of the cream was good. Cream does not show any type of phase separation during storage. The cream was non-grassy in nature and easily removable after application. The formulation was Nonirritant and not harm to the skin .

The formulated herbal face cream, using ingredients like cucumber peel, amla, and aloe vera, showed positive results in terms of stability, skin safety, and antibacterial properties. The stability tests confirmed the cream's resilience, with no phase separation or texture changes under stress. Additionally, the irritancy tests indicated that all formulations were safe for use on sensitive skin, showing no signs of redness or inflammation. Overall, the herbal cream provided a natural, safe alternative to synthetic products, demonstrating better skin benefits and aligning with the growing demand for eco-friendly skincare solutions. Further research could explore additional herbal combinations to enhance these benefit.

II. CONCLUSION

In conclusion, the formulation and evaluation of a Herbal Face Cream offers promising benefits for skincare enthusiasts. By combining various herbal ingredients, The formulation process involves carefully selecting and combining different herbs known for their beneficial properties for the skin, such as exfoliation, cleansing, moisturizing. and antioxidant effects. These herbs are typically chosen based on their traditional use in skincare practices and scientific evidence supporting their efficacy. This evaluation includes various assessments such as stability testing, microbial testing, sensory evaluation, and compatibility testing. These tests help determine the product's shelf life, microbial safety, sensory attributes (e.g., texture, smell), and compatibility with different skin types.

Secure with that the artificial one. Herbal information has developing called for with in side that Global market. Herbal face creams are taken into consideration as maintaining and efficiency Manner to the boost the arrival of pores and skin.



In market, there are various type of face cream are available , claiming that they proect skin from uv radiations, sunlight etc.at considerable rate and minimum time. Formulation of cream pH, Spreadability, Washability, non irritancy test, viscosity and phase separation of cream and gives good result .

REFERENCES

- [1]. MV Vishvanathan, PM Unnikrishnan, Kalsuko Komatsu, Hirotooshi Fushimi. A brief introduction to Ayurvedic system of medicine and some of its problems. Indian J Traditional Knowledge 2003;2:159-69.
- [2]. Newall CA, Anderson LA, Phillipson JD. Herbal medicines. A guide for health- care professionals. London: The Pharmaceutical Press, 1996.
- [3]. Atherton P. Aloe Vera revisited. Br J Phytotherapy 1998; 4: 176-183.
- [4]. Krishnaveni M, Mirunalini S. Therapeutic potential of Phyllanthus emblica (amla): The Ayurvedic wonders. J Basic Clin Physiol Pharmacol 2010, 21:93-105.
- [5]. Patel SS, Goyal RK. Emblica Officinalis Geart: A Comprehensive Review on Photochemistry, Pharmacology and Ethno medicinal Uses. Res J Med Plant 2012;6:6- 16
- [6]. Chandrashekhar B. Badwaik, Mr. Sharad Manapure, Dr. Suhas Padmane, Dr. Sheelpriya Walde. EVALUATION OF INVITROANTIOXIDANT ACTIVITY OF ERAGROSTIS PILOSA WORLD JOURNAL OF PHARMACY AND PHARMACEUTICAL SCIENCES 2021; 10(7):1025-1032.
- [7]. Chandrashekhar Bhojraj Badwaik, Dr.Suhas padmane, Dr.Sheelpriya Walde, Mr.Sharad Manapure. NATURAL PRODUCTS IN ANTICANCER THERAPY. International Journal of Advances in Engineering and Management (JAEM) 2021;3(4):605-607.
- [8]. Chandrashekhar B. Badwaik, Updesh B. Lade, Prachi Barsagade, Santosh N. Ghotefode. Madhuri S. Nandgaye, GOUT-A REVIEW ON PATHOPHYSIOLOGY ETIOLOGY, AND TREAMENT. Journal of Emerging Technologies and Innovative Research (JETIR) 2022;9(1):d688-d694.
- [9]. Madhuri S. Nandgaye, Ajay Dongarwar, Upadesh B. Lade, Santosh N. Ghotefode, Tikesh Agrawal, Chandrashekhar B. Badwaik. "Phytochemical Screening andEvaluation of Antibacterial & Antifungal Activity of Terminalia Bellerica Bark". Journal of Emerging Technologies and Innovative Research (JETIR), 2022;9(1):d170- 4182
- [10]. Sheila John, Priyadarshini S,Sarah Jane Monica, Sivaraj C, Arumugam P.IN VITRO ANTIOXIDANT AND ANTIMICROBIAL PROPERTIES OF CUCUMIS SATIVUS L. PEEL EXTRACTS. INTERNATIONAL RESEARCH JOURNAL OF PHARMACY. 2018, 9 (1):56-60.
- [11]. Tanweer S., Ahmad S., Albert H. Burns. 24(6):539-551. Seyed A., Seyed H., Mohammad A. (1996). Management of psoriasis with Aloe vera extract in a hydrophilic cream: a placebo controlled, double, blind study. Tropical Medicine & International Health. 1(4):505-509.
- [12]. Talal A., Feda M. (2003). Plants used in cosmetics. Phytotherapy research. 17(9):9871000.
- [13]. Glaser D. (2003). Anti-aging products and cosmeceuticals. Facial Plastic Surgery Clinics of North America. 12(3):363-372
- [14]. Fulton J.E. Jr. (1990). The stimulation of postdermabrasion wound healing with stabilized aloe vera gel-polyethylene oxide dressing. J Dermatol Surg Oncol. 16(5):460470.
- [15]. Dennis P. (2003). Evaluation of aloe vera gel gloves in the treatment of dry skin associated with occupational exposure: Devices and Infection, AJIC: American Journal of Infection Control. 31(1):40-42
- [16]. Bozi A., Perrin C., Austin S., Arce Vera F. (2007). Quality and authenticity of commercial Aloe vera gel powders. Food Chemistry. 103(1):22-30
- [17]. Hermans M.H.E. (1998). Results of a survey on the use of different treatment options for partial and full thickness. Burns. 24(6):539-551.
- [18] Somboonwong J., Thanamitramanee S., Jariyapongskul A., Patumraj S. (2000), Therapeutic effects of Aloe vera on cutaneous microcirculation and wound healing in second degree burn model in rats. J Med Assoc Thai. 83(3):417-425
- [19]. Rawlings A.V., Harding C.R. (2004). Moisturization and skin barrier function. Dermatologic Therapy. 17(1):43-48.



- [20]. Dal'Belo S.E., Gaspar L.R., Berardo P.M., Campos G.M. (2006). Moisturizing effect of cosmetic formulations containing Aloe vera extract in different concentrations assessed by skin bioengineering techniques. *Skin Research and Technology*. 12(4):241-246.
- [21]. Montgomery D., Parks D. (2003). Tattoos: Counseling the adolescent. *Journal of Pediatric Health Care*. 15(1): 14-19.
- [22]. Jacobs G. (2002). Anthocyanins in vegetative tissues: a proposed unified function in photoprotection. *New Phytologist*. 155(3): 349-361.
- [23]. Edmund D.P. (2001). What every facial plastic surgeon must know. *Herbal Therapy*. 13(1):27-132.
- [24]. Ernst E. (2000). Adverse effects of herbal drugs in dermatology. *British Journal of Dermatology*. 143(5):923-929.
- [25]. <https://pharomeasy.in/blog/10-health-benefitsof-gooseberry-amlam-for-skin-and-hair/>
- [26]. 105761 <https://www.herzindagi.com/beauty/howyou-can-use-cucumber-peelsarticle->
- [27]. Parveen Ruhil, Vivek Kumar, Neha Minochi. Formulation and evaluation of herbal cream used in the treatment of arthritis research. *Indian J Res* 2018; 7:356-7.
- [28]. SK Uddandu Saheb, Aduri Prakash Reddy, K Rajitha, B Sravani, B Vanitha. Formulation and evaluation of cream from naturally containing plant extract. *World J Pharm Sci* 2018; 7:851-61.
- [29]. Renuka Shukla, Varsha Kashaw. Development, characterization and evaluation of poly-herbal ointment and gel formulation containing neriumindicum mill, artocarpusheterophylluslam,muraya

