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Formulation And Evaluation Of Herbal Face Cream

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Abstract— 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. Cosmetics and some medicinal products are made up from the mucilaginous tissue in the centre of aloe vera leaf and called Aloe vera gel

Aloe vera gel contains no Antraquinone. Which are Responsible for the strong laxative affects of aloes. However, total leaf extract may contain Antraquinone. Aloe vera contains 75 potentially active constituents like Vitamines, Enzymes, Minerals, Sugars, Saponis, Amino acids. Amla contain Amino acid like glutamic acid, proline, And Aspartic acids etc. Protein, Minerals. Cucumber peels are rich in fiber and contain minerals like magnesium, potassium, and silica. The silica is an essential component to keep your muscles, bones, and tendons healthy. It also hydrates our skin, improves complexion and vision.

Keyword: Aloe vera, Amla, Cucumber peels, facecream.

INTRODUCTION: Skin is the outermost tissue of the body and the largest organ in terms of both weight and surface area.It has an area of approximately 16, 000 cm2 for an adult and represents about 8% of the body
weight.As seen in Figure 1, skin has a very complex structure that consists of many components. Cells, fibersand other components make up several different layers that give skin a multi-layered structure. Veins,capillaries and nerves form vast networks inside this structure. In addition, hairs stick out from the insideof skin. Numerous fine hair furrows are scattered over the surface of skin.Skin performs a wide variety of functions resulting from chemical and pHysical reactions inside these components.

The major function of skin is to act as a barrier to the exterior environment. It protects the body from friction and impact wounds with its flexibility and toughness. Harmful chemicals, bacteria,viruses and ultraviolet light are also prevented from entering the body by the skin. It also prevents waterloss and regulates body temperature by blood flow and evaporation of sweat. The Skin is the outermost tissue of the body and the largest organ in terms of both weight and surface area.It has an area of approximately 16, 000 cm2 for an adult and represents about 8% of the body weight.As seen in Figure 2, skin has a very complex structure that consists of many components. Cells, fibersand other components make up several different layers that give skin a multi-layered structure. Veins,capillaries and nerves form vast networks inside this structure. In addition, hairs stick out from the insideof skin. Numerous fine hair furrows are scattered over the surface of skin.Skin performs a wide variety of functions resulting from chemical and pHysical reactions inside these components. The major function of skin is to act as a barrier to the exterior environment. It protects thebody from friction and impact wounds with its flexibility and toughness. Harmful chemicals, bacteria ,viruses and ultraviolet light are also prevented from entering the body by the skin. It also prevents water loss and regulates body temperature by blood flow and evaporation of sweat. These functionalities are critical to our well being. The secretion of sweat and skin lipid cause the elimination of a number of harmful substances resulting from metabolic activities in the intestines and the liver. Furthermore, skin has a large amount of nerve fibers and nerve endings that enable it to act as a sensory organ.

FUNCTIONS OF SKIN

Protection from war and tear:
The skin varies in thickness according to the amount of friction and pressure to which it is subjected on the eyelids it is about 1mm thick, while on the palms of the hands and soles of the feet it can be up to 1cm. The toughness of skin is due to the amount of the insoluble protein keratin within it. There is little or none where the skin is not subject to friction (for example, inside the lips) and more where the skin is subjected to constant external pressure. Subcutaneous fat beneath the skin acts as a shock absorber and helps to protect the body from traum.

Protection against infection and chemicals
Although large numbers of micro-organisms live on the skin, these cannot break the barrier created by intact healthy skin. Trauma to the skin creates an opportunity for invasion by micro-organisms and results in an inflammatory response characterised by redness, swelling, localised heat, pain and pyrexia. Blood flow increases and transports white blood cells and macropHages to the site of injury to fight infection and repair the tissue. The skin also provides protection

against weak chemicals and most gases.

Protection against ultraviolet:
The skin protects the body from harmful UV rays. The pigment melanin is produced in special cells called melanocytes, which are found at the base of the epidermis. Melaninproduction is influenced by sunlight. When skin is over exposed to the sun's rays, it becomes red with erythema (flushing of the skin in response to dilatation of blood vessels in the dermis) due to inflammation. The skin then turns brown as melanin is produced. Melanin absorbs UV light and prevents it damaging cellular DNA Hair, made of keratin, also helps to protect people from UV light as well as from extremes of temperature and trauma.

HISTORY OF HERBS

Aloe vera:

Occurrence And Distribution:

It belongs to Asphodelaceae (Liliaceae) family, and is a shrubby or arborescent, perennial, xeropHytic, succulent, pea- green color plant. It grows mainly in the dry regions of Africa, Asia, Europe and America. In India, it is found in Rajasthan, Andhra Pradesh, Gujarat, Maharashtra and Tamil Nadu.

Taxonomical Classification Family: AspHodelaceae
Species: A. vera
Kingdom: Plantae Order: Asparagales Indian Names: **Sanskrit** : Kumarirashav

CHEMICAL CONSTITUENTS

Major constituents : Glycosides-Anthracene derivatives: Hydroxyanthraquinone derivatives(25-40)
aloin (=barbaloin, a mixture of aloin A & B, the diastereoisomeric 10-C glucosides ofaloe-emodin anthrone) and 7-hydroxyaloin isomers.
Indian aoles contain aloinosides as major constituents with only traces of aloin
.

Minor constituents:

Aloeemodin,

ChrysopHano,l

Amla:

Ocurence and distribution:

Amla (Emblica officinalis) (EO) has a hallowed position in Ayurveda- an Indian indigenous system of medicine1 . According to belief in Indian mythology, Amla is the first tree to be created in the universe; which belongs to the family of EupHorbiaceae andis also known as Phyllanthus emblica or Indian gooseberry.Amla is native to India and also grows in tropical and subtropical regions of Pakistan, Uzbekistan, Sri Lanka, South East Asia, China and Malaysia.

Chemical Constituents of Amla:-
The fruit of Amla is rich in vitamin C (ascorbic acid) and contains several bioactive pHytochemicals, of which majority are of polypHenols (ellagic acid, chebulinic acid, gallic acid, chebulagic acid, apeigenin, quercetin, corilagin, leutolin, etc.)

Cosmetological Importance of Amla:
Well, you must be wondering how gooseberry can be used to your skin. You canconsume it with honey or you can also apply it on your skin directly and reap its benefits. If you are finding it hard to consume this sour fruit, then try making juice out of it and consume it.
This will do good for your skin. Here are some health benefits of gooseberry for yourskin.

Cucumber:

Occurrence And Distribution:

Europe, Asia, the Middle East, some parts of the U.S.A.

Taxanomical classification:Order: Cucurbitales
Family: Cucurbitaceae **Genus:** Cucumis
Species: C. sativus

Chemical Constituent Of Cucumber:
Cucumber fruit mostly contains water (95%) and small amounts of protein (0.6%), lipids (0.1%) and carbohydrates (2.2%). Cucumber plant is widely cultivated in Greece and the annual production represents the 26.7% of the total vegetable production.

Uses:
Cucumber helps keep the face fresh and glowing, owing to the silica and high water content.
Using cucumber slices on the eyes reduces puffiness and makes dark circles vanish from under the eyes.
Do not discard cucumber peel it has many.
health benefits. The benefits include its beneficial.
effects in eye disorders, vitamin A& C deficiency.
constipation and bones and muscles disorder.
Cucumber peels are rich in fiber and contain.
minerals like magnesium, potassium, and silica.

The silica is an essential component to keep your muscles, bones, and tendons healthy.
hydrates our skin, improves complexion and vision.

SPINACH

Chemical constituent:

Spinach leaves contain chloropHyll a, chloropHyll b and beta-carotene as major pigments as well as smaller amounts of other pigments such as xanthopHylls. In green leafy vegetables such as spinach, only the green chloropHylls are

seen because they mask the bright red, orange and yellow colours of the carotenoids. Blanching spinach reduces its

Sr.No.	Ingredient	Quantity
1	Aloevera	9.37 gm
2	Amla	6.25 gm
3	Cucumber peels	5 gm
4	Bees wax	20 gm
5	White soft parafin	56.25 ml
6	Methyl paraben	1.87ml
7	Distilled Water	q.s
8	Menthol	1.19 ml
9	Glycerine	6.25ml
10	Propylene glycol	6.25 ml
11	Zinc oxide	4.37 gm
12	Sodium benzoate	0.625 gm
13	Spinach (Colouring Agent)	q.s.
14	Rosemary (Flavouring Agent)	q.s.

percentage of chloropHyll. ChloropHyll is lipopHilic.

Uses:

Spinach used as Colouring agent.

Rosemary:

Occurance and Distribution:
Salvia rosmarinus, commonly known as rosemary, is a shrub with fragrant, evergreen. It soon was spread to South America and global distribution.

Kingdom: Plantae

Family: Lamiaceae

Uses:

Rosemary oil is used for purposes of fragrant bodily perfumes or to emit an aromainto a room. It is also burnt as incense, and used in shampoos and cleaning products.

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 foruniform mixing.
After few minutes oil pHase was formed.

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

PREPARED FORMULATION

Evaluation Parameter:

Evaluation of herbal cream was following. A] Physical Evaluation:
Formulated herbal creams was further Evaluated by using the following physical parameter physical parameter colour, odour, consistency, and state of the formulation.

Sr. No	Parameter	Result
1	Colour	White green
2	Odour	Characteristics
3	State	Semisolids
4	Consistency	Smooth
5	PH	6.7
6	Spredability	7.4 gm.cm/cm
7	Washability	Easy washable
8	Non irritancy test	Non irritant
9	Viscosity	39015
10	PH as separation	No pHase seperation
11	After feel	Emollient

Colour:

The colour of the cream was observed by visual examination. The result was shows intable 3.
Odour:
The odour of cream was found to be characteristics.
State:
The state was cream was examined visually. The cream was solid in state resultwas shows in table 3.

Consistency:
The formulation was examined by rubbing cream on hand manually. The cream having smooth consistency.
pH:
pH of prepared herbal cream was measured by using digital pH meter. The solution of cream was prepared by using 100 ml of Distilled water and set aside 2h. PH was determined in three times for solution and the average value was calculated. Results were shown in table 3.

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 the time taken for sepration of two slides results showed better Spredability. Spredability was calculated by the following formula.
Spredability(S)=Weight tide to upper slide (W) x Length of glass slide (L) / Time taken to separate slide (T
Washability:

Formulation was applied on the skin and then ease extends of washing with water was checked. Results were shown in table 3.
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 results was shown in table

RESULT AND DISCUSSION

The present study was the formulation and evaluation of polyherbal cream. The evaluation parameters were coming under results, like 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 3 .
The present work was the formulation and evaluation of polyherbal cream. This creamformulation 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 pH as separation during storage. The cream was non-grassy in nature and easily removable after application. The formulation was Nonirritant and not harm to the ski

CONCLUSION

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

REFERENCE

i. Indian pharmacopoeia ,edition 2018,volume 1st 954,1000.
ii. Indian pharmacopoeia ,edition 2018 volume 2nd , 1178,3735,1330,2862,2568,2528,2183.
iii. Indian pharmacopoeia ,edition 2018,volume 1st 954,1000.
iv. Indian pharmacopoeia ,edition 2018, volume 3rd 3026,3540,3206,3849.

v. International journal of Pharmaceitcal Reasearch and Application on "Formulation and Evaluation of Herbal Face Cream" By Chandrashekhar B .Badwaik, Updesh .Lade,Vol 7Page no.955-960.
vi. Review On Pathophysiology, Etiology, And Tratment ,Sheila John , Priyadarshini S
vii. ,Sarah Jane Monica ,Sivaraj C ,Arumugam ,688-d694..

viii. Phytotherapy research:omboonwong ,Plants used in cosmetics J., Thanamittramanee S.,Jariyapongskul A., Patumraj S. ,987-1000.
ix. Therapeutic effects of Aloe vera on cutaneous microcirculation and wound healing insecond degree burn model in rats. J Med Assoc Thai. :417-425.
x. Adverse effects of herbal drugs in dermatology. British Journal of Dermatology. :923-929.
xi. Phytotherapy research Plants used in cosmetics Talal A., Feda M. ch :987 – 1000.

xii. International Research Journal Of Pharmacy In Vitro Antioxidant And Antimicrobial Properties Of Curcumis Sativus L. Peel Extract Sheila John , Priyadarshini S ,Sarah JaneMonica ,Sivaraj C ,Arumugam P . 2018,:56-60.
xiii. World J PHarm Sci Formulation and evaluation of cream from naturally containing plant extract. , SK Uddandu Saheb, Aduri Prakash Reddy, K Rajitha, B Sravani, B Vanitha 851-861.
xiv. A Review on Cucumber: Curpumis Sativus,by Hinasaeed,anamwaheed,Vol 2.Page No.402-405.
xv. Indian Journal of Dermatology " aloevera:A short Review",Amar Surjushe,Resham vasani Page No.1-7.