



REVIEW ON POLYHERBAL HAIR OIL

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Abstract:-

Hair plays a very important role in the personality of humans and for their cure by using lots cosmetic products. Herbal formulations always have activity and comparatively lesser or no effects with synthetic. Hair formulation of Embica officinalis (Fruits), Eclipta alba(Leaves), Trigonella foenumgraecum (Seeds), Murraya koenigii (Leaf), Hibiscus rosasinensis (Flowers) in different concentrations in the form of herbal oil were studied for their hair growth , refractive index, acid value, saponification value. In medicine, herbs are used as an integral part of health care system. Be sides herbs are also used for of the body for preparation of various and colours. The formulated herbal oil was evaluated and various parameters such as viscosity, saponification value, pH etc.

Keyword: - Herbal Hair Oil, Anti – Dandruff, Hairfall, Hair growth.

Introduction:-

Ayurveda literally means "science of life", and is considered as traditional medicine of India. In Ayurvedic medicine, herbs are used as an essential part of health care system. The synthetic chemical compounds have replaced many Ayurvedic plant products, the safety and of the natural products could not find suitable match. Herbal drugs obtained from are believed to be much safer in the treatment of various diseases. Hair is a protein that grows from follicles found in the dermis. Hairs are most important that improves the overall appearance of a person. The hair fall, Dandruffs, split ends, grey are the major problem associated with hair.

To overcome these problems, we use lots of cosmetic. Among these, hair loss (alopecia) is a universal problem having affected both sexes all races to different extents for as long as mankind has existed. The hair care industry has aware of this and delivering active products directed towards meeting this costumer demand. In traditional Indian system of medicine, many plants and herbal formulations are for hair growth promotion as well as improvement of quality of hair.

Minerals and vegetable oils are used to make a variety of commercial and traditional hair oils. Coconut oil is a common ingredient. Other vegetable sources include almond, argan, babassu, burdock, Castor, and tea seed. Natural oils are used more commonly as cosmetic products on the scalp. Natural oils come from natural resources that are very high in nutrients such as vitamins and fatty acids.[1,5]

Coconut Oil :-

Coconut oil has properties that reduce protein loss in hair when used before and after wash. Coconut oil is known to have lauric acid, which is a type of fatty acid that may penetrate the hair shaft due to a low molecular weight and linear conformation.[7]

Argan oil :-

Argan oil originates from Morocco and is known for a conditioning effect that leaves hair soft and relieves frizz.[21]

Avocado oil: -

Avocado oil is rich in nutrients. It has a high concentration of vitamin E, which is an antioxidant that may decrease hair loss and encourages hair growth. [22]

Other oils: -

Oils including almond oil, grapeseed oil, jojoba oil, olive oil may promote hair elasticity and help prevent dryness and hair damage. Oils on the hair can reduce the absorption of water that damages hair strands

through repeated hygral stress as hair swells when wet, then shrinks as it dries. Oils also protect cuticle cells in the hair follicle and prevent the penetration of substances like surfactants. Saturated and monounsaturated oils diffuse into hair better than polyunsaturated ones. The hair fall, dandruffs, split ends, gray hair are the major problem associated with hair. Hair loss is distressing condition for an increasing number of men and women. Hair loss is or alopecia, is a common patient problems/complaint.[23]

Objective:-

- To prevent the dandruff, spit ends, and dull hair.
- To promote the hair growth and smoothness that is req for beautifying and attractions of the hair.
- To supplement the hair with vital nutrients such as vitamins, and materials.
- To prevent hair from damage and loss caused by pollution.

General ingredient:-

1. Eclipta Alba:-



Fig:-Eclipta alba

Table No.1

Kingdom	Plantae
Subkingdom	Viridaplantae
Division	Tracheophyta
Subdivision	Spermatophytina
Class	Magnoliopsida
Order	Asterales
Family	Asteraceae
Genus	Eclipta
Species	Alba

Biological source:-

Eclipta alba family composite.[9]

Chemical Constituents:-

The principal constituents of Eclipta alba are coumestan derivatives like wedololactone[1.6%], demethylwedololactone, desmethyl-wedelolactone-7glucoside and other constituents are ecliptal, β -amyrin, luteolin-7-O-glucoside, hentriacontanol, heptacosanol, stigmasterol.[6]

Plant part used - leaf

Uses:-

-Eclipta hair oils is indicated in hair fall, premature greying and various dermatological disease of scalp.

-Eclipta alba stimulates the formation of hair follicles.[9]

2. Amla:-



Fig:-Amla

Table no.2

Kingdom	Plantae
Division	Magnoliophyta
Class	Magnoliopsida
Order	Euphorbiaceae
Family	Euphorbiaceae
Genus	Phyllanthus L
Species	Phyllanthus EL
Botanical Name	Emblca Officinalis

Biological source:-

Dried fruits of phyllanthus embilica.[4]

Chemical Constituents:-

It is highly nutritious and is an important source of vitamin C, minerals, and amino. The edible fruit tissue contains protein 3-fold and ascorbic acid 160-fold compared to that of the. The fruit also contains considerably higher of most minerals and amino acids apples. The pulpy portion of fruit, dried and from the nuts contains: gallic acid 1.32%, , sugar 36.10%; gum 13.75%; albumin ; crude cellulose 17.08%; mineral matter ; and moisture 3.83%.[13]

Plant part used – fruit

Uses:-

- Strengthen the scalp and hair.
- Reduce premature pigment loss from hair, or greying.
- Stimulate hair growth.
- Reduce hair loss.

3. Neem:-**Fig:-Neem****Table no.3**

Kingdom	Plantae
Subkingdom	Tracheobionta
Superdivision	Supermatophyta
Division	Magnoliophyta
Class	Magnoliopsida
Subclass	Rosidae
Order	Sapindales
Family	Meliaceae
Genus	AzadirachtaIndica A. Juss

Biological source:-

Neem consists of the fresh or dried leaves and seed oil of AzadirachtaIndica Indica.[5]

Chemical Constituents:-

Main chemical components are nimbin, azadirachtin, azadirachtol, azadirachtol, desacetynimbinene, nimbandiol, quercetin, beta- sitosterol, n- hexacosanol, nimbiol and nimocin.[12]

Plant part used – leaf**Uses:-**

- Stimulates hair growth.
- Helps with dandruff and itchiness.
- Condition dry hair.[12]

4. Hibiscus flower:-



Fig:-Hibiscus flower

Table no.4

Kingdom	Plantae
Subkingdom	Tracheobionta
Division	Magnoliophyta
Subdivision	Spermatophyta
Class	Magnoliopsida
Subclass	Dilleniidae
Order	Malvales
Family	Malvaceae
Genus	Hibiscus L-Rosemallow

Biological source:-

Dried Leaves of hibiscus flower.[7]

Chemical Constituents:-

Approximately 15%-30% of the plant is made up of acids, including citric, malic, tartaric acids, alloxanthonic acid, and ascorbic acid lactone—i.e. hibiscus IPacid, which is specific to this plant. Other chemical constituents are many, including alkaloids, L- ascorbic acid, anthocyanin, Beta-carotene, Beta-sitosterol, citric acid, polysaccharides, arabinosides, and arabinogalactans, quercetin, gossypetin, and a small amount of galactose, arabinose, glucose, xylose, mannose, and rhamnose.[16]

Plant part used - flower leaf

Uses:-

- Stops hair loss.
- Makes your hair look healthy and lustrous.
- Hibiscus hair growth from dormant hair follicles helping cover bald patches and also combats dryness and dandruff.[14]

5. Curry Leaves:-



Fig:-Curry Leaves

Table no.5

Kingdom	Plantae
Subkingdom	Tracheobionta
Division	Magnoliophyta
Superdivision	Spermatophyta
Class	Magnoliopsida
Order	Sapindales
Family	Rutaceae
Genus	Murraya j. Koenig ex L
Species	Murrayakoenigii spreng

Biological source:-

The species name commemorates the botanist Johann König. The genus Murray commemorates Swedish physician and botanist Johann Andreas Murray who died in 1791. Hence the botanical name of the curry leaves is Murrayakoenigii.[17]

Chemical Constituents:-

Murrayakoenigii is very rich source of organic compounds with different chemical composition such as alkaloids, flavonoids carbohydrates, and sterol is present in the plant extract prepared in solvents such as petroleum ether, ethyl acetate, chloroform, ethanol and water.[8]

Plant part used - leaf.

Uses:-

Curry leaves used as hair mask gives you bouncy and shiny hair.

Anti dandruff Curry leaves when used regularly remove dead hair follicles, which is one of the reason behind dandruff.[2,3]

6. Fenugreek seeds:-



Fig:-Fenugreek seeds

Table no. 6

Kingdom	Plantae
Phylum	Tracheopvtes
Subphylum	Angiosperm
Class	Eudicots
Subclass	Rosids
Order	Fabales
Family	Fabaceae
Genus	Trigonella
Species	T.foenum- graecum

Biological source:-

Methi consists of dried ripe seeds of trigonellafoenumgracum.[11]

Chemical Constituents:-

Trigogenin, neotrigogenin, diosgenin, yamogenin, 4-hydroxyisoleucine, vitexin, isovitexin, saponaretin, homoorientin, vicenin-1, vicenin-2 and two flavonoid glycosides quercetin and luteolin and steroidal saponins have been isolated from seeds.[18]

Plant part used – seeds.

Uses:-

- Fenugreek - or methi - seeds are frequently used as a natural home remedy for thinning hair and other related condition, such as dandruff or a dry, itchy scalp.
- Beauty publication and other popular media sources claim that they're the secret to growing thick , shiny hair.

7. Coconut oil:-



Fig:-Coconut Oil

Table No.7

Kingdom	Plantae
Subkingdom	Tracheobionta
Superdivision	Supermatophyta
Division	Magnoliophyta
Class	Liliopsida
Subclass	Aresidae
Order	Arecales
Family	Areaceae
Genus	Cocos L

Biological source:-

Coconut oil is the oil expressed from the dried solid part of endosperm of coconut, *Cocosnucifera* L., Belonging to family *Palmae*. [19]

Chemical Constituents:-

Coconut obtained from the hard, dried endocarp consists of a mixture of triglycerides of saturated fatty acids. The oil contains about 95% of saturated fatty acids with 8 and 10 carbon atoms. It shows the presence of caprylic acid, 2%; capric acid, 50–80%; lauric acid, 3%; and myristic acid about 1%.[10]

Plant part used - fruit.

Uses:-

- Coconut oil is used to improve hair and scalp health.
- It helps to get rid of some types of fungal infections.
- Helps to heal or prevent dandruff and other fungi on the scalp.

Collection of Plant Materials:

The Polyherbal hair oil will preparation by collecting and using various plant materials these are, hibiscus , rosasinesis leaf, curry leaf, aloe Vera leaf, amla, shikakai, coconut oil, are collect from local market . Plant profile of some herbal material used in preparation of polyherbal hair oil was given below,[25]

Table no.8

Sr. No.	Ingredients
1.	Hibiscus flower leaf
2.	Eclipta alba leaf
3.	Amla
4.	Curry leaf
5.	Fenugreek seeds
6.	Neem leaf
7.	Coconut oil

Method of preparation of polyherbal hair oil:-

- The parts of plants like Shikakai (powder), and Fenugreek (seeds) were collected from the local market.
- Aloe Vera pulp (Leaves), and Hibiscus (flower), are dried in sunlight, and converted into coarse powders.
- The extracts were prepared by decoction method & the prepared extracts were stored in well- closed containers.
- Precisely all the dried and fresh herbs, Hibiscus, Shikakai, Aloe Vera pulp & Fenugreek were weighed and triturated in the mortar & pestle and mixed with Almond oil.
- The above content was boiled for 15 min and filtered through a muslin cloth.
- To the filtrate, coconutoil was added to the makeup volume.
- Finally, a small amount of flavoring agent (Jasmine oil) was added to the oil.
- Vit E was used as a preservative.
- It was placed in a closed container.[24]

Evaluation of Polyherbal hair oil:-

Evaluation of Polyherbal hair oil The formulation herbal oil is evaluation for parameters like pH, acid value, saponification value, viscosity.

Sensitivity Test:-The prepare herbal hair oil is apply on 1 cm skin of hand and expose to sunlight for 4-5 min.

Saponification Test:-Accurately weigh 1 mL of oil into a 250 mL of conical flask and 10 mL of ethanol : ether mixture (2 : 1) will add. To this flask 25 mL of 0.5 N alcoholic KOH was. Kept the flask for 30 min. and the flask is cool. The cool solution was titrated against 0.5 N HCl using phenolphthalein indicator. Similarly the blank titration is performed without taking oil (sample). Amount of KOH in mg used was calculated.

pH:-The pH of herbal hair oil was determined using pH meter.

Sensitivity Test:-Take the specific gravity bottle, rinse it with distilled water, dry it in oven for 15 minutes, cool, close it with cap and weigh it (a). Now fill the same specific gravity bottle with the sample and close it with cap and again weigh it (b). Determine the weight of sample per milliliter by subtracting the weight (b-a).

Viscosity:-Viscosity

Organoleptic properties:-

coloration: Detect by means of bare eyes.

Sensitivity: implement to the skin and expose to the sunlight for few minutes to check for any inflammation over pores and skin.

Grittiness: Rubbed to the skin and determine.

Sedimentation: Hold the entire instruction aside for overnight and check for sedimentation.

Acid cost:-10 ml of oil turn into add with 25ml of ethanol and 25ml of ether. Phenolphthalein change into Deliver as indicator and titrated with zero.1M Potassium hydroxide solution. N = wide variety of ml of 0.1M KOH qw= Wt. of oil.

Specific gravity:-Specific gravity of the prepared oil became decide the usage of unique gravity bottle.

Balance study:- It is preferred with the aid of retaining the organized natural hair oil in a close container at cool and dry place.[24]

Application of Polyherbal Hair Oil:-

-Herbal hair oils were serving the purpose of hair treatment.

-Herbal hair oil not only moisturizes scalp but also reverses dry scalp and dry hair conditions.

- It provides numerous essential nutrients required to maintain normal functions of the sebaceous gland and promote natural hair growth.

-It is used in these systems for the treatment of many disease, including diabetes.

Uses of polyherbal Hair Oil:-

-Moisturizing: Polyherbal hair oil can help keep hair moisturized.

-Strengthening: Polyherbal hair oil can help strengthen hair.

-Preventing dandruff: Polyherbal hair oil can help prevent dandruff caused by bacteria.

-Promoting hair growth: Polyherbal hair oil can help promote hair growth.

-Turning gray hair black: Polyherbal hair oil can help turn gray hair black.

-Protecting from heat and styling damage: Polyherbal hair oil can help prevent damage caused by heat and styling.

-Increasing shine: Polyherbal hair oil can help increase shine.

-Reducing hair dryness: Poly herbal hair oil can help reduce hair dryness.

-Preventing excessive oiliness of the scalp: Polyherbal hair oil can help prevent excessive oiliness of the scalp.

Conclusion:-

This review provides guideline on the use of herbal ingredients on the Herbal Hair oil having minimal or no side effects. Herbal oil provide best vitamins, antioxidants, essential oil, and also provides nutrients of hair growth. This maintaining good hair growth of hairs, stopping hair loss, reduces dandruff of hairs, also shining of hairs.

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