

# A COMPREHENSIVE ANALYSIS OF HERBAL AGENTS IN DERMATOLOGICAL FORMULATIONS

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## ABSTRACT:

India is a focus for development of Ayurveda, Unani, Siddha, Homoeopathy and another natural herbs based health science (AYUSH). Ayush Pharmaceutical industry having great possible and contingency for saundarya Prasadka category (herbal cosmetic) development in future. The Herbal cosmetic contains herbal shampoo, herbal hair conditioner, herbal soap, Herbal face wash etc. That's are used to improve skin appearance. Used in skin care and used in hair herbal cosmetic Products avoid the adverse effects such as itching, burning or irritation the skin. Cosmeceuticals is the fastest growing Segment of the personal care products these are cosmetic preparations which contain biologically active principles or Ingredients of plant origin. The natural ingredients chosen for preparation of herbal cream are Turmeric, Papaya, Aloe Vera, Tulasi, Amla, Cucumber, Neem. The choice of these ingredients is based on their individual Properties. These formulations can be evaluated by various parameters like pH, viscosity, irritancy, Spreadability, microbial growth, thermal stability, homogeneity, acid value, saponification value, Accelerated stability studies, patch test, smear test, after feel, washability, physical properties, dye test, After feel, in vitro diffusion study, etc.

**KEYWORDS:** Cosmetics, Herbal Cosmetics, Skin Care, Hair Care.

## INTRODUCTION

The Greek word “Kosmetikos, “which means to have beauty, create ability, or to garnish, is from which the word “cosmetic” derives. Cosmetics are available in a variety of types, comprising cream, lotions, perfumes, skin-cleansing Products, and decorative cosmetics. In so many cosmetic preparations, natural substances are used. Understanding Cosmetic action principles is now becoming highly significant as developers attempt to develop more complex products, Including skincare products. Skincare is a type of cosmetic product defined as Cosmeceuticals. The demand of cosmeceuticals is rapidly expanding. This expansion is due to the availability of new ingredients, the financial rewards for developing successful products, consumer Formulation needs maintenance of quality standard. The quality of a formulation should satisfy The consumer's need in terms of its performance. The plant parts used in cosmetic preparation Should demand, and a better understanding of skin physiology. Cosmetics are the products that are created for application on the body for the purpose of cleansing, beautifying or altering appearance and enhancing the beauty. 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” .

The history of the herbal cosmetics Industry includes very dark chapters in European and Western countries from about six centuries Back. Mixtures and pastes were then used to whiten The face, a practice which remained popular till Over four hundred years later. The early mixtures That were used in Europe for this purpose were so Potent that they often led to paralysis, strokes or Death. In that era, the history of herbal

cosmetics in The 1940s shows how the fashion or trend with Respect to lipstick colours was changed annually, Getting darker and closer to red every passing year. Herbal medicines include herbs, herbal materials, Herbal preparations and finished herbal products. In Some countries herbal medicines may contain, by Tradition, natural organic or inorganic active Ingredients that are not of plant origin (e.g. animal And mineral materials).

Herbs include crude plant material, such as leaves, Flowers, fruit, seeds, stems, wood, bark, roots, Rhizomes or other plant parts, which may be entire, Fragmented or powdered. Herbal materials include, in addition to herbs, fresh Juices, gums, fixed oils, essential oils, resins and Dry powders of herbs. In some countries, these Materials may be processed by various local Procedures, such as steaming, roasting or stir-Baking with honey, alcoholic beverages or other Materials.

## IDEAL CHARACTERISTICS

- ❖ Good penetration ability, allowing the medication in the cream to absorb into the skin to deliver the intended effect.
- ❖ It should not be poisonous in order to prevent undesirable skin reactions, such as itching, rashes, or redness.
- ❖ It should spread freely across skin when applied.
- ❖ When applied to skin, it should melt or liquefy at body temperature.
- ❖ Be non-irritating and not produce skin inflammation.

## ADVANTAGES

- Ease of application.
- Easy to utilize.
- Steering clear of danger.
- There is no special risk.

## APPLICATION

- ❖ Avoid drug level fluctuations in the event of intra- and Inter-patient variance.
- ❖ Very good patient adherence. The benefit of employing cream formulations is their practicality; they can be applied directly to the skin without leaving any traces behind, and they are simple to wash and Clean.

## LIMITATIONS

- It can be used primarily for medications that require extremely little plasma concentration for effect.
- It increases the risk of allergic reaction.
- Larger particle-sized medications are difficult to absorb through skin pores.
- Possibility of contact dermatitis or skin irritation from any medication.

## COSMECEUTICALS

The strongest area of the cosmetics industry is cosmeceuticals. Cosmeceuticals are restorative drug preparations that aim to improve the health and appearance of the skin by achieving a specific goal, including such reducing skin inflammation across the board, providing sun protection, or providing anti-wrinkle and anti-aging advantages. They function as both a skin protectant and a skin irritant. The magnificence business' quickest extending area is cosmeceuticals. Cosmeceuticals are restorative drug items that mean to improve the wellbeing and presence of the skin by accomplishing a specific objective, like skin inflammation the board, sun security, or hostile to flaw and against maturing benefits. They are both a skin-ensuring and a skin-flickering agent.

*Some natural plants/herbs/ingredients used in cosmetic industry are as follows:*

- Aloe vera
- Henna
- Neem
- Turmeric
- Shikakai
- Rose oil
- Coconut oil

### **ALOEVERA**

Aloe vera is a plant belonging to liliaceae family and extensively employed for cosmetic Purpose. It offers healing effect to skin wound; Having moisturizes and softening potential Towards skin. The amino acids present in Aloe Vera like; leucine & isoleucine, glycosides saponin possessing cleansing action while other Ingredient such as vitamins and folic acid provides antioxidant activity thus delayed symptoms of early ageing. Antimicrobial and moisturizing effect of Aloe vera help skin to remain free from microbial deterioration and Prevent skin to become dry and rough. Shooting Effect of Aloe vera provides cooling sensation and prevents initial manifestation of sun burn.



**Fig:ALOEVERA**

## ***HENNA***

Henna comes from Lythraceae family and Mainly employed as dye in cosmetic industry in The form of powder or paste. It is employed Extensively as coloring dye and as per Indian tradition its use considered as sign of prosperity During festive or marriage season. Many hair care products containing Henna since it's significantly improves hair pigmentation and hides symptoms of ageing.

**Fig:HENNA**



## ***NEEM***

Neem belongs to the family Meliaceae, offers antimicrobial and moisturizing effects therefore present in many cosmetic products used for External application. Soap containing Neem used to manage minor skin infection or as prophylactic agent to prevent fungal infection.Face wash having neem as chief ingredient possessing anti-acne, anti-wrinkles, anti-ageing and anti-microbial effects, it also offers Moisturizing and help to reduces pimples



**Fig:NEEM**

## ***TURMERIC***

Turmeric is a yellow-to-orange powder obtained from herb named *Curcuma longa* belongs to family Zingiberaceae. Turmeric contains phytochemicals such as; Demethoxycurcumin, curcumol, eugenol, curcumin and turmeronols. Curcumin is responsible for yellow color and having many cosmetic values. Turmeric offers antiseptic effects therefore employed to cure small cuts of skin, it possesses antioxidant potential therefore help to scavenge free radicals and delayed symptoms of ageing.



**Fig;TURMERIC**

Turmeric helps improve complexion therefore many fairness cream containing turmeric as chief ingredient. Turmeric also offers anti-microbial properties therefore help to manage skin infection when applied topically.

## ***COCONUT OIL***

Coconut oil contains glycerides derived from the fruit or seed of the coconut tree *Cocos nucifera*, family Areaceae. Coconut oil is used in cosmetic industry as skin moisturizer and softener to prevent dryness of skin especially in winter season. Coconut oil nourishes hair, maintain hair pigmentation and strengthen hair root. It enhances muscle tone and relaxes muscles therefore also utilized for massage purpose. Other than cosmetic value it is also employed for cooking purpose.

**Fig:COCONUT OIL**



## **ROSE OIL**

The Damask rose, Iran's public bloom, is a Middle eastern local with an extensive history. It is one of Iran's most well known plants. Roses are by and large viewed as the world's most famous blossom, inferable from their wide scope of plant territories and botanical features. Rose oil and scent offer an assortment of restorative properties. Rose oil loosens up the psyche and soothes despairing, nervousness, and tension, the public bloom of Iran, is local to the Middle East, it has a long history. It is one of the most famous plants in Iran. In the solvent extraction method, the flowers are agitated in a vat with a solvent such as hexane, which draws out the aroma compounds as well as other soluble substances such as wax and pigments. The extract is subjected to vacuum processing which removes the solvent for re-use.



**Fig:ROSE OIL**

## **CONCLUSION**

Natural remedies are more acceptable in the belief that they are safer with fewer side effects than the synthetic ones. The skin is the most accessible part of the body and as such is also highly vulnerable to injuries. In case of cuts, burns and wounds, topical formulations such as creams are the most Preferred for treatment. Research and development for the Formulation of pharmaceutical creams for wound healing Purpose has grown in recent decades owing to its obvious benefits. With the progress in the pharmaceutical field and Industry, it is assured that pharmaceutical creams will still be an interesting and appealing area of research for years to come. More advanced technologies and methods will be used For preparation, formulation and evaluation of creams in Coming years. The demand of herbal constituents-based Creams is also increased day by day.

The Uses of bioactive ingredient in topical formulations Influence biological functions of skins and provide nutrients Necessary for the healthy skin. There are various herbs available naturally having different uses in cream preparations. Herbal creams are considered as sustaining and productive way to advance the appearance of skin. They also Consist of natural nutrients like Vitamins and minerals that keep skin healthy, glowing and lustrous. The use of bioactive components in cosmetics influence biological function of skin and provide nutrients necessary. There is a huge opportunity to introduce a variety of herbal cosmetics employing the right bioactive substances and the right fatty acids, essential oils, proteins, and additives. The ability and safety of herbal cosmetics products are subject to strict quality monitoring. Therefore, a quality control test needs to be done for herbal cosmetics. Therefore, we can conclude from all of the research on herbal cosmetics that they are the most effective alternative for the artificial Cosmetic.

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