



## STUDIES ON TRADITIONAL HERBAL COSMETICS USED BY TRIBAL WOMEN IN DISTRICT JAIPUR (RAJASTHAN)

**APARNA PAREEK**

Department of Botany, University of Rajasthan, Jaipur, Rajasthan, India.

Corresponding author : E-mail: [aparna992000@yahoo.com](mailto:aparna992000@yahoo.com)

Since ancient times women have turned to the beautifies of nature to help or increase their own beauty. Even today, people especially in rural areas depend upon plants for traditional cosmetics. The research work is confined to herbal cosmetics with special reference of local communities of district Jaipur (Rajasthan). Through questionnaires, study was conducted in 10 villages of district Jaipur to collect information from local people for preparation, use of herbal cosmetics and their conservation. Indigenous data on 28 herbal recipes for skin and hair care were collected from respondent informants. Local communities, especially woman heavily use these herbal cosmetics for their beauty and believe that these are easily available, less expensive, and have no side effects.

**Keywords:** Ethnobotany; Herbal cosmetics; Indegenous; Local communities.

### Introduction

Cosmetics pertaining to herbal drugs are formulated, using different ingredients to form the base in which one or more herbal ingredients are used to cure various skin ailments. The name itself suggests that herbal cosmetics are natural and free from all the harmful synthetic chemicals which otherwise may prove to be toxic to the skin. Compared to other beauty products, natural cosmetics are safe to use. Cosmeceuticals are cosmetic-pharmaceutical hybrid products intended to improve the health and beauty of the skin by providing a specific result, ranging from acne-control and anti-wrinkle effects, to sun protection. These products improve the functioning/texture of the skin by boosting collagen growth by eradicating harmful effects of free radicals, maintains keratin structure in good condition

and making the skin healthier. There are numerous herbs available naturally having different uses in cosmetic preparations for skincare, hair care and as antioxidants. The current review highlights importance of Studies herbal cosmetics, the herbs used in them and their advantages over the synthetic ones.

From prehistoric days, plants are used for shelter, food and medicine. The use of plants for medicinal purposes is as old as our civilization. The first known written record of curative plants was of Sumerian herbal of 2200 BC. In the 5th century BC, The Greek doctor Hippocrates list out some 400 herbs in common use. Dioscorides, in the 1<sup>st</sup> century AD, wrote a herbal by using 600 plants which ultimately became the base for many later works. Since early age plants have served for human adornment for the

millennia and people have been using various kinds of herbs to maintain their beauty. The study revealed that the use of plants as herbal cosmetics is prevalent among the tribal communities and represent not only a part of their ethnic culture but also witness the use of plants in their regular health care practices since ancient times. The collection and documentation of tribal knowledge based on the cosmetic use of plants is no doubt a remarkable step keeping in view the fading ethnic traditions and culture. Attempts should be made to authenticate and evaluate the efficacy and cosmetic value of these plants and their products used by the tribals. Moreover, there is urgent need to conserve the germ plasm and cultivation of such plants in suitable agro climatic zones for their better survival to meet the demand of herbal cosmetic industry for the welfare of human being. The use of plants in beauty care is well known by the tribals of the rural areas. The cosmetics are the utility products used extensively throughout the world for maintaining and improving general appearance of face and other parts of body e.g. mouth, hand finger, eye, hair, etc. It includes creams, powders, face pack, lotions, moisturizers, shampoo, hair oil, conditioners, nail polish, etc. Numerous chemical toxins, microorganisms, chemicals, infections present in atmosphere cause damage to skin. Cosmetics alone are not sufficient to take care of skin and body parts, it require association of active ingredients to check the damage and ageing of the skin<sup>1</sup> Herbal cosmetics are now emerged as the appropriate solution to the current problem. Personal care industry is currently more concentrated on herbal cosmetics as now-a-days it is a fast growing segment with a vast scope of manifold expansion in coming years<sup>2</sup> Herbal

cosmetics are the preparations, which represent cosmetics associated with active bio-ingredients, neutraceuticals or pharmaceuticals. The use of bioactive phytochemicals from a variety of botanicals have dual function, (i) they serve as cosmetics for the care of body and its parts and (ii) the botanical ingredients present therein influence biological functions of skin and provide nutrients necessary for the healthy skin or hair. In general, botanicals provide different vitamins, antioxidants, various oils, essential oils, hydrocolloids, proteins, terpenoids and other bioactive molecules.<sup>3,4,5</sup>

A vast biodiversity and different climatic conditions of our country provide a variety of botanicals, which can be used in the formulations. Our traditional knowledge about the use of plant wealth as described in Ayurveda, Siddha, Unani and Tibetan system of medicine, is of great help to identify the photochemical for skin and body care preparations. Necessary efforts are required to associate the modern cosmetology with bioactive ingredients based on our traditional system of medicine leading to emergence of novel cosmeceuticals for skin and hair care. The current review highlights importance of herbal cosmetics, the herbs used in them and their advantages over the synthetic counterparts. This article will focus on a selected group of botanical compounds, many of which have long traditions in Asian medicine, with potential or exhibited dermatologic applications and simultaneously in hair care.

#### **Materials and Method**

Frequent field surveys were conducted in the rural areas of District Jaipur .The ethno botanical data were collected through interviews and discussions among the tribal practitioners in and around the study area.

Data were also collected through questionnaires in their local language. The plants were identified, photographed and sample specimens were collected for the preparation of herbarium.

### Results and discussion

Some Indian medicinal plants, which have been studied in detail for their use in cosmetics by the tribal people of Jaipur district, Rajasthan are mentioned here for further exploration in Table 1 & 2.

**Table 1.** Plants used for skin care

| Botanical Name                   | Common Name | family         | Distribution                              | Uses   |
|----------------------------------|-------------|----------------|---|--|
| <i>Adhatoda vasica</i> Nees      | Vasaca      | Acanthaceae    | Throughout India                          | Fresh leaf extract is used for skin affection and control of scabies.                          |
| <i>Ailanthus excelsa</i> Roxb    | Maharukh    | Simaroubaceae  | Throughout India                          | Useful in skin creams and lotions  |
| <i>Allium sativum</i> Linn       | Garlic      | Alliaceae      | Throughout India                          | Garlic oil is a source of Sulphur and controls sores, pimples and acne.                        |
| <i>Aloe vera</i> Linn            | Ghikanwar   | Liliaceae      | Indian Continent                          | Juice and pulp is applied on skin for smoothness, healing, skin burn and injury.               |
| <i>Azadirachta indica</i> A.Juss | Neem        | Meliaceae      | Indian warmer parts                       | Azadirachtin present is an antiseptic agent.   |
| <i>Carica papaya</i> Linn        | Papaya      | Caricaceae     | Throughout India                          | Milky juice of unripe fruit is a good ingredient for facial and face creams.                   |
| <i>Citrus limo</i> (Linn.)Burm.f | Nimbu       | Rutaceae       | Throughout India                          | Oil is skin nourishment and reduces skin itching.  |
| <i>Cuscuta reflexa</i> Roxb.     | Akash bel   | Convolvulaceae | Throughout India                          | Plant extract is used to control dermatitis, itching and ringworm.                             |
| <i>Eclipta alba</i> (Linn. Hassk | Bhringraj   | Asteraceae     | Throughout India                          | Paste of herb is useful to control skin diseases and eczema.                                   |
| <i>Mimosa pudica</i> linn        | Lajwanti    | Mimosaceae     | Throughout India                          | Herb extract applied in skin creams and lotions in controlling itching.                        |
| <i>Momordica charantia</i> Linn. | . Karela    | Cucurbitaceae  | Throughout India                          | Plant extract possesses antioxidant properties   |
| <i>Ocimum sanctum</i> Linn,      | Tulsi       | Lamiaceae      | Throughout India                          | Leaves extract is useful to control skin infection and rejuvenation.                           |
| <i>Phyllanthus emblica</i> Linn. | Amla        | Euphorbiaceae  | Tropical and subtropical regions of India | Fruit extract possesses anti oxidant properties.   |
| <i>Withania Somnifers</i> Dunal  | Ashwagandha | Solanaceae     | Drier parts of Himalayas                  | Whole plant extract is used in skin cleansing formulations and possess antioxidant properties. |

**Table 2.** Plants used in haircare

| <b>Botanical name</b>                    | <b>Common name</b> | <b>Family</b> | <b>Distribution</b>           | <b>Uses</b>  |
|--|--------------------|---------------|-------------------------------|--|
| <i>Acacia concinna</i><br>DC (Shikakai)  | Shikakai           | Mimosaceae    | Tropical forest of India      | Pods extract is used as hair cleanser and for control of dandruff.                       |
| <i>Arnica Montana</i><br>Linn            | Arnica             | Asteraceae    | Cultivated sparingly in India | Flower extract is used in hair oil as a tonic material. It stimulates the hair follicle. |
| <i>Betula pendula</i>                    | Birch              | Betulaceae    | South west India              | Extract of leaves is used as anti-dandruff   |
| <i>Brassica spp</i>                      | Mustard            | Brassicaceae  | Throughout India              | Seed oil is used as hair oil and useful for hair nourishment.                            |
| <i>Carthamus tinctorius</i><br>Linn      | Safflower          | Asteraceae    | Indian plains                 | Alcoholic extract is used in hair tonics   |
| <i>Centella asiatica</i><br>Linn         | Mandukaparni       | Apiaceae      | Throughout India              | Whole plant extract is used for the growth and maintenance of hairs.                     |
| <i>Eclipta alba</i><br>(Linn)Hassk       | Bhangra            | Asteraceae    | Himalayan region              | Whole plant extract is useful for hair nourishment and dyeing.                           |
| <i>Lawsonia inermis</i><br>Linn          | Henna              | Lythraceae    | Throughout India              | Leaf paste is used for hair dyeing and nourishment.                                      |
| <i>Phyllanthus emblica</i><br>Linn       | Amla               | Euphorbiaceae | Throughout India              | Fruit extract is used in oils for promotion of hair growth.                              |
| <i>Sapindus mukorossi</i><br>Gaertn.     | Ritha              | Sapindaceae   | Cultivated in India           | Extract of fruit coat works as natural shampoo   |
| <i>Sesamum indicum</i><br>Linn           | Til                | Pedaliaceae   | Warmer region of India        | Seed oil is one of the major sources of hair oil.  |
| <i>Terminalia bellerica</i><br>Roxb      | Bahera             | Combretaceae  | Throughout India              | Seed extract and oil is good for hair dying preparation.                                 |
| <i>Terminalia chebula</i><br>Retz.       | Harra              | Combretaceae  | Throughout India              | Seed extract is used in hair care formulations.  |
| <i>Trigonella foenum-graecum</i><br>Linn | Fenugreek          | Fabaceae      | Throughout India              | Seed extract is used as hair cleanser.   |

In the present investigation 28 plants used by the tribal women of Jaipur district (Rajasthan) for skin and hair care were identified. Among them 14 plants were used for skin care and 14 plants were used for hair care. Since early age plants have served for human adornment for the millennia and

people have been using various kinds of herbs to maintain their beauty. The study revealed that the use of plants as herbal cosmetics is prevalent among the tribal communities and represent not only a part of their ethnic culture but also witness the use of plants in their regular health care

practices since ancient times. The most common plants recorded are *Curcuma longa*, *Ocimum sanctum*, *Vitex negundo*, *Sesamum indicum* and flour of *Cicer aritinuma*<sup>1</sup>. The collection and documentation of tribal knowledge based on the cosmetic use of plants is no doubt a remarkable step keeping in view the fading ethnic traditions and culture. Attempts should be made to authenticate and evaluate the efficacy and cosmetic value of these plants and their products used by the tribals. Moreover, there is urgent need to conserve the germplasm and cultivation of such plants in suitable agroclimatic zones for their better survival to meet the demand of herbal cosmetic industry for the welfare of human being.<sup>6,7</sup>

### Conclusion

The present article focuses on the potential of herbal extracts for cosmetic purposes by the tribals residing in the rural areas around Jaipur District. It also makes an attempt to give scientific account of use of herbal extracts in cosmetics. The use of bioactive ingredients in cosmetics influence biological functions of skin and hair. The addition of herbal extracts for therapeutic or for excipient purpose requires better understanding of the modern ingredients and herbal extracts.<sup>6,7</sup> This article may help cosmetic and personal care industry, marketers and modern scientists understand various different trends of potential use to research on anti-aging cosmeceutical approaches to delaying, defying, and preventing skin aging and growth of hair. The development of these traditional systems of medicines with the perspectives of safety, efficacy and quality will help not only to preserve this traditional heritage but also to rationalize the use of natural products in the health care. Thus, we can easily

identify rare and extinct plants for the conservation and preserved the traditional heritage of the traditional practitioners. The traditional knowledge with its holistic and systems approach supported by experimental base can serve as an innovative and powerful discovery engine for newer, safer and affordable medicines. These plant species mentioned in the ancient texts of Ayurvedic. The development of these traditional systems of medicines with the perspectives of safety, efficacy and quality will help not only to preserve this traditional heritage but also to rationalize the use of natural products in the health care. Thus, we can easily identify rare and extinct plants for the conservation and preserved the traditional heritage of the traditional practitioners

### Acknowledgement

Author is thankful to DST, Govt of Rajasthan for providing financial support.

### References

1. Sharma L, Agarwal G, Kumar 2003, Medicinal plants for skin and hair care. *Indian J Trad Know.* 2 62-8.
2. Basmatekar G, Jais N, Daud F (2011) Aloe vera: A valuable multifunctional cosmetic ingredient. *Int J Med Arom Plants* 1: 338-341.
3. Barnes J, Anderson LA and Phillington JD Herbal Medicines 2002. A guide for healthcare professionals Edition, Pharmaceutical Press, London,
4. Dash B and Sharama BK. Charak Samhita, 7th ed. Varanasi India: Chaukhamba Sanskrit Series Office.
5. Draelos ZD 2003a, Botanical antioxidants Cosmetic Dermatol; 6 (9) 46-49.
6. Joshi H 2012, Potentials of traditional medicinal chemistry in cosmetology industry; prospectives and

- perspectives. Anaplastology an open access journal 1: 3.
7. Kadam VS, Chintale AG, Deshmukh KP and Nalwad DN 2013, Cosmeceuticals an emerging concept: A comprehensive Review. International journal of research in pharmacy and chemistry, **3** 308-316.