

## THE INCREASING USAGES OF PLANTS IN COSMETICS AND SKINCARE INDUSTRIES

## Mrs. Pramila Parida

Lecturer in Sriram Degree College, Soro, Balasore.

#### Abstract

This review represents the use of some natural products in cosmetic preparations, due to their low mammalian toxicity, with a brief description of the major use, plant parts used, the actives responsible for effect and the benefits of such products. Their use in skin care; such as dryness, eczema, acne, free-radical scavenging, anti-inflammatory, anti-aging and skin protection effects are explained, and also the use in hair care as hair growth stimulants, hair colorants, and for hair and scalp complaints such as dandruff. Essential oils when incorporated into finished products impart many benefits such as a pleasant aroma in perfumery, shine or conditioning effects in hair care products, emolliency and improving the elasticity of the skin. People have used plants over time to care for their physical aspect, and also how natural resources are currently used in personal-care products.

Key Words: Plants, Cosmetic, Skincare, Antioxidant.

#### Introduction

Plant extracts and herbs have been used for cosmetic purposes by many civilizations since time immemorial, and plants were, for centuries, the only way to obtain colorants, fragrances and products for soothing and protecting skin. In more recent times, with the development of chemistry and petrochemistry, synthetic raw materials of interest to the cosmetic industry became available in huge quantities and at low price and largely replaced natural extracts and compounds. However, in the last few decades cosmetic ingredients based on plants or plants derivatives have made a powerful comeback, and claims referring to "plant origin", "natural origin" and "naturally derived", to name just a few ,have become a major trend in the field of beauty. This trend reversal is largely consumer-driven and depends on several reasons; they include the increasing aversion for animal-derived products, ecological concerns and probably the most important, the large number of myths about the safety of some controversial cosmetic ingredients that in recent times pervaded the media and the net.

## Why plants are used in cosmetics and skincare

**plants** are rich in amino acids, antioxidants, and oligopeptides that help in reducing fine lines and wrinkles from the skin, doing an anti-aging effect. Also, the leaves and flowers are good for hair care. The flowers are used in the preparation of many skin and hair nourishment products.

#### **Plants with Cosmetic Use**

# 1. Aloe Vera (Aloe barbadensis)

<u>Aloe vera</u> plant has numerous healing qualities and for this reason, it has a variety of uses in cosmetics as well. The leaves of the aloe vera plant contains a gel-like substance that has many minerals, vitamins, and amino acids. All these nutrients have moisturizing, soothing, toning, and anti-inflammatory properties. Its juice is also used in making moisturizing lotions, creams, deodorants, and hair care products.

# 2. Rose (Rosa)

Roses are prized for their unmatched beauty and fragrance! They are available in a large range of species that are used as an ornamental plant in homes and gardens. Apart from that, roses



have many uses in the cosmetic industry as well, as its oil is rich in vitamins with exceptional hydrating, *antibacterial*, *and antifungal* qualities, making it one of the best plants with cosmetic uses.

## 3. Lemon (Citrus Limon)

Lemon has been used in skin and hair care products for ages, as it is a rich source of vitamin C. It also boosts cell renewal, controls sebum production, and makes skin more firm and toned. The lemon has extensive use in the cosmetic industry in making oils, creams, and lotions.

# 4. 4. Tomato (Solanum lycopersicum)

Tomatoes are high in lycopene that combats cell damage, skin inflammation and helps in shrinking large pores, curing acne, treat sunburn, and rejuvenate dull skin. Its extract is widely used in many lotions, sunscreen, and skincare products.

# 5. **5.** Neem (Azadirachta indica)

Indian lilac, commonly known as neem, has a variety of uses in making soaps, creams, and lotions. The neem oil contains limonoids, antioxidants, vitamin E, and calcium that works in treating wrinkled skin, scars, acne, and in promoting collagen production.

# **Dry skin treatment**

#### 1. Coconut oil:

Coconut oil comes from the fruit or seed of the coconut palm tree Cocos nucifera, family Aceraceae's melting point of coconut oil is 24 to 25 °C (75-76 °F) and thus it can be used easily in both liquid or solid forms and is often used in cooking and baking. Coconut oil is excellent as a skin moisturizer and softener. A study shows that extra virgin coconut oil is effective and safe when used as a moisturizer, with absence of adverse reactions. [3] A study found that coconut oil helped prevent protein loss from the wet combing of hair when used for fourteen hours.

#### 2. Sunflower oil:

It is the non-volatile oil expressed from sunflower seeds obtained from Helianthus annuus, family Asteraceae. Sunflower oil contains lecithin, tocopherols, carotenoids and waxes. In cosmetics, it has smoothing properties and is considered noncomedogenic.

# **Anti-Aging Treatment**

#### 1. Golden Root

Rhodiola rosea (Roseroot, Aaron's rod), is a plant in the Crassulaceae family that grows in cold regions of the world. The Rhodiola root has long been used in the traditional medical systems in Europe and Asia to increase an organism's resistance to physical stress, currently; it is widely thought to have antioxidative properties.

#### 2. Carrot

It is obtained from the plant Daucus carota belonging to family Apiaceae. It is a valuable herb since ages as it is rich natural source of Vitamin A along with other essential vitamins. Carrot seed oil is indicated for anti-aging, revitalizing and rejuvenating. As it promotes the formation of new cells and helps in reducing wrinkles. It acts as Natural toner and rejuvenator for the skin.

#### 3. Ginkgo

Ginkgo comes from the ginkgo tree. Ginkgo biloba belongs to family Ginkgoaceae, which grows to a huge size. It is best known, as a circulatory tonic, in particular for strengthening the tiny little capillaries to all the organs, but especially to the brain. The capillaries become more



flexible and as a result more oxygen is delivered to the brain and eyes (to protect against degenerative eye diseases like macular degeneration), so important as we age. Ginkgo also protects the nervous system and fights oxidation.

## **Skin Protection**

#### 1. Green Tea

Green tea is tea made solely with the leaves of Camellia sinensis belonging to family Theaceae Whether applied topically or consumed as a beverage or dietary supplement, green tea is a premiere skin protectant. It protects against direct damage to the cell and moderate's inflammation, according to research from the Department of Dermatology, Columbia University, New York. Studies suggest that the catechins in green tea are some 20 times stronger in their antioxidant powers than even vitamin E. Men, women and children need to position this super shield on their side against the ravaging effects of the sun.

## 2. Calendula

Calendula, pot marigold, is a genus of about 12–20 species of annual or perennial herb, essential oil plants in the daisy family Asteraceae. Calendula in suspension or in tincture is used topically to treat acne, reducing inflammation, controlling bleeding and soothing irritated tissue. There is "limited evidence" that calendula cream or ointment is effective in treating radiation dermatitis. In a randomized study of 254 radiation patients, topical application of 4% calendula ointment resulted in far fewer occurrences of Grade 2 or higher dermatitis than occurred in the group using trolamine. Calendula users also experienced less radiation-induced pain and fewer breaks in treatment.

#### Conclusion

The knowledge of medicinal plants used by the people of seems to be well known to its culture and tradition. In the present study we identified many plants used by the people to cure dermatological disorders and as cosmetics. Some of the plants were found to have dual use, both as curative and cosmetic. Further extensive ethnobotanical and ethnopharmacological study may lead to the discovery of plant sand compounds for skin care and cure. Natural ingredients are everywhere and are continually gaining popularity, and the use of plant extracts in cosmetic formulation is on the rise. A cosmetic formulation including active principles of natural origin can protect the skin against exogenous or endogenous harmful agents, and help to remedy many skin conditions. In addition, natural products can be used in hair care, and as hair colorants or dyes. Aromatic plants and oils have been used for thousands of years, as incense, perfumes, cosmetics, and for their medicinal and culinary applications. Essential oils impart many benefits, such as a pleasant aroma, especially in perfumes and to impart shine or conditioning in a hair care product, and for emolliency or improving the elasticity of the skin.

#### References

- 1. Agarwala OP. 1997. Whole leaf aloe gel vs. standard aloe gel. Drug Cosmet Indust Feb: 22–28.
- 2. Aggag ME, Yousef RT. 1972. Study of antimicrobial activity of chamomile oil. Planta Med 22: 140–144.
- 3. Agiga T, Seki T. 2000. Flavor components of garlic (Allium sativum L.) and their multiple functions. Aroma Res 1: 16–27. Aikawa Y. 2002.
- 4. Topical preparations containing mango seed kernel oils. Jpn Kokai Tokkyo Koho 5: JP20002322074. Akhtar MW, Iqbal MZ, Nawazish MN. 1980.



- 5. Lipid class and fatty acid composition of pumpkin seed oil. J Sci Res 32: 295–300. Al-Ghamdi MS. 2001.
- 6. The anti-inflammatory, analgesic and antipyretic activity of Nigella sativa. J Ethno pharmacol 76: 45–48
- 7. Ali BH, Bashir AK, Tanira MOM. 1995. Anti-inflammatory, antipyretic, and analgesic effects of Lawsonia inermis L. (henna) in rats. Pharmacology 51: 356–363.
- 8. Ali R, Sayeed SA. 1997. Lawsone: phenolic of henna and its potential use in protein-rich foods and staining. ACS Symp Series 662: 223–244.
- 9. Ammon HPT, Wahl MA. 1991. Pharmacology of Curcuma longa. Planta Med 57: 1–7. Aniya Y, Shimabukuro M, Shimoji M, et al. 2000.
- 10. Antioxidant and hepatoprotective actions of the medicinal herb Artemisia campestris from the Okinawa islands. Biol Pharm Bull 23: 309–312.
- 11. Ankri S, Mirelman D. 1999. Antimicrobial properties of allicin from garlic. Microbes Infect 1: 125–129. Arquette DJ, Bailyn EM, Palenske J, Bergman D De Vorn, Rheins LA. 1998.
- 12. Non-comedogenic and hypoallergenic properties of jojoba oil and hydrogenated jojoba oil. J Cosm Sci 49: 377–383.
- 13. Aruna K, Sivaramakrishnan VM. 1996. Anti carcinogenic effects of the essential oils from cumin, poppy and basil. Phytother Res 10: 577–580. Arunachalam K. 1980.
- 14. Antimicrobial activity of garlic and onion extracts. Pharmazie 38: 747–748.
- 15. Aruoma OI, Spencer JP, Rossi R, et al. 1996.
- 16. An evaluation of the antioxidant and antiviral action of extracts of rosemary and Provencal herbs. Food Chem Toxicol 34: 449–456.