

PROGRESS IN DEVELOPMENT OF HERBAL COSMECEUTICALS: CURRENT STATUS AND PROSPECTS

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ABSTRACT

Now a days, use of herbal cosmetic preparations is going on increasing across the world. This might be due to its more aesthetic value and lesser or without side effects. The active chemical constituents present in plants are responsible for their beauty effects. Since the ancient time, most of the plants are being used for increasing the appearance of person. In traditional medicine system, there is report of more than 1000 such types of herbs that are being used in the preparation of many beauty products. These products possess advantages such as economic, easy availability, and widely acceptance by peoples. Personal skin care products are in huge demand due to the growing consumer awareness about natural ingredients. They are formulated by using different herbs to make the base in which one or more herbal ingredients are used to cure various skin diseases or disorders. In present paper, we have covered utmost information about various herbs and plants used in cosmeceuticals.

Keywords – Medicinal plants; Cosmeceuticals; Aloe vera; Antioxidant; Anti-aging.

1. INTRODUCTION

In the 21st century, researchers across the world are focusing they're on the exploring the potential medicinal plants in the treatment, prophylaxis or mitigation of various diseases or disorders. Plant plants have gained much attention by researcher towards use of plants Herbal Cosmetics (Herbal cosmeceuticals), a natural cosmetic, are formulated using various cosmetic ingredients to form the base in which one or more herbal ingredients are used to provide cosmetic benefits. Plants are highly used for development of new drug products for cosmeceuticals applications [1].

Ethno-botanical information of such plants and their usage by indigenous cultures is useful in the conservation of traditional system of medicine, biodiversity, to promote health care system [2]. There are thousands of such types of plants widely available throughout the world. Such plants include, *Withania somnifera*, *Aloe vera*, *Azadirachta indica*, *Murraya Koenigii*, *Carica papaya*, *Allium sativum*, etc [3-13]. Herbal cosmetics are the products in which herbs are used in crude or extract form. These products do not produce instant cures but their effects are long lasting. Now a day, WHO focusing attention towards the developing countries to encourage them to use herbal medicine, which they have been traditionally, used for centuries [14].

2. CURRENT STATUS

With the help of herbal cosmeceuticals, people can maintain their appearance and good health as it contains natural ingredients. Herbs are considered to be food rather than medicine because they're complete, all natural and pure, as nature intended. When herbs are taken, the body starts to get cleansed, it gets purifying itself. Unlike chemically synthesized, highly concentrated drugs that may produce many side effects, herbs can effectively realign the body's defences [15-17].

Herbs do not produce instant cures, but rather offer a way to put the body in proper tune with nature for thousands of years, humans have used herbs. Herbs have been used in the following ways - In cooking for flavoring foods, as perfumes, as disinfectants, to protect us against germs, as medicines to heal when we are sick [16-20].

3. NEED OF HERBAL COSMETIC

Herbal cosmetics are required for the following purpose [21].

- To enhance general appearance
- Minimize skin defects
- Psychological application
- Social application
- Clinical application
- Protection of skin from UV rays, dust and rigid climate
- Cleansing effect
- Emollient effect.

4. ADVANTAGES OF HERBAL COSMETICS

Herbal cosmetics are the modern trend in the field of beauty and fashion. These agents are gaining popularity as nowadays most women prefer natural products over chemicals for their personal care to enhance their beauty as these products supply the body with nutrients and enhance health and provide satisfaction as these are free from a possible human carcinogen. Herbal cosmetics contain natural antioxidants like vitamin C [22].

4.1. Natural products

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. Instead of traditional synthetic products different plant parts and plant extracts are used in these products, e.g. aloe-vera gel and coconut oil. They also consist of natural nutrients like Vitamin E that keeps skin healthy, glowing and beautiful. For e.g. Aloe vera is an herbal plant species belonging to Liliaceae family and is naturally and easily available [23-24].

4.2. Safe

Compared to other beauty products, natural cosmetics are safe to use. They are hypo-allergenic and tested and proven by dermatologists to be safe to use anytime, anywhere. Since they are made of natural ingredients, people don't have to worry about getting skin rashes or experience skin itchiness. Example - BHA (Butylated Hydroxy Anisole) and BHT (Butylated Hydroxy Toluene) are closely related synthetic antioxidants and are used as preservatives in lipsticks and moisturizers. BHA and BHT can induce

allergic reactions in the skin. The international Agency for Research on Cancer classifies BHA as a possible human carcinogen [25-27].

4.3. Compatibility

Natural cosmetics are suitable for all skin types. No matter if you are dark or fair, you will find natural cosmetics like foundation, eye shadow, and lipstick which are appropriate irrespective of your skin tone. Women with oily or sensitive skin can also use them and never have to worry about degrading their skin condition. Coal tar-derived colours are used extensively in cosmetics, Coal tar is recognized as a human carcinogen and the main concern with individual coal tar a colour (whether produced from coal tar or synthetically) is they can cause cancer. But natural colours that are obtained from herbs are safer [28].

4.4. Wide range of selection

Natural cosmetics may still be a new type in the beauty industry but they already offer a variety of beauty products for all make up crazy people out there to choose from. One will find a variety of foundation, eye shadow, lipstick, blush, mascara, concealer and many more which are all naturally formulated. There exist a large variety of herbal extracts, to name a few *Andrographis paniculata* (Kalmegh), *Asparagus racemosus* (Shatawari), *Boswellia serrata* (Salai Guggal), Asphalt (Shilajit), etc [29].

4.5. Affordable

These products are more affordable than synthetic ones. They are offered at discounted prices and are sold for a cheap price during sales. Just need to survey enough to look for great deals. World Health Organization currently recommends and encourages traditional herbal cures in natural health care programs as these drugs are easily available at low cost and are comparatively safe [30].

4.6. Ready for use

Some cosmetics are initially tested on animals to ensure that they are safe and effective to use for human. However, natural cosmetics need not be tested on animals. These natural formulations are tested by experts in laboratories using state of the art equipment with no animals involved [31].

5. REGULATORY STATUS

The legal difference between a cosmetic and a drug is determined by a product intended use. Under present concept, the boundary at which a cosmetic product becomes drug is not well-defined and different laws and regulations apply to each type of product. The drugs and cosmetic Act 1940 define a drug and a cosmetic as; Cosmetic- "Any article intended to be rubbed, poured, sprinkled or sprayed on or introduced into or applied to any part of the human body for cleansing, beautifying, promoting attractiveness or altering the appearance and includes any article intended for use as a component of cosmetic [32].

Some products meet the definitions of both cosmetics and drugs. This may happen when a product has more than one intended uses. For example, a shampoo is a cosmetic because its intended use is to clean the hair. An anti-dandruff shampoo is a drug because its intended use is to treat dandruff. Among the cosmetic/drug combinations are toothpastes that contain fluoride, deodorants that are antiperspirants and moisturizers with sun-protection claims. The claims made about drugs are subject to detailed analysis by the FDA review and approval process, but cosmetics are not subject to mandatory FDA review. Although there is no legal category called cosmeceuticals, the term has found application to designate the products at the border line between cosmetics and pharmaceuticals [33-34].

6. EXTRACTS FOR HERBAL COSMETICS

Herbs play a significant role, especially in modern times, when the damaging effects of food processing and overmedication have assumed alarming proportions. They are now being increasingly used in cosmetics, foods and teas, as well as alternative medicines. The growing interest in herbs is a part of the movement towards change in life-styles. This movement is based on the belief that the plants have a vast potential for their use as a curative medicine [35-37].

7. MARKETED FORMULATIONS

There are number of herbal cosmetic products available in the market. Some of them are shown in Fig. 1.



Fig. 1: Marketed herbal cosmetic products.

8. ANALYSIS OF HERBAL COSMETICS

There are many analytical tools that can be used for the analysis of various pharmaceuticals as well as herbal formulations including herbal cosmetics. These methods include UV-spectrophotometry, gas chromatography, HPLC, HPTLC, etc [38-87].

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DISCLOSURE OF CONFLICT OF INTEREST

The author declares no conflict of interest.

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