History of Cosmetic in Egypt, India, and China

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Synopsis

Cosmetics are preparations used to improve and enhance human appearance. The concept of beauty and cosmetics is as ancient as mankind and civilization. The use of plants and herbs for cosmetics was started in ancient times. Egyptians believed that healing plants possess supernatural power. Herbs used for cosmetics in China are popular and are biologically active in today's cosmetics. The most commonly used herb, as a cosmetic in India, is turmeric, which is still in use as the beauty routine before the wedding. In Egypt, around 10,000 BCE both men and women were using scented oils and ointments to clean their skin and mask body odor. The use of cosmetics in India dates backs to the Vedic and Puranic periods. Due to the increased consciousness about beauty, demand for the products is increasing, which results in the growth of the cosmetic industry.

INTRODUCTION

Cosmetics are an intrinsic part of health and hygiene. Men and women used scented ointments to cleanse their skin and also to mask body odor and decorate one's face or body. The historical data points to the existence of such practices are as early as about 10,000 BCE (1). In ancient India, there is high evidence that both men and women were using cosmetics. The use of cosmetics had started from Ramayana, Mahabharata, Vedic, and Puranic periods (2). Various cosmetics, which were used in the olden days, are still used in present days such as turmeric and sandalwood for skincare, henna for coloring the palms and hairs, etc. Turmeric has been in use in India as cosmetics, home remedies, and medicines until recently before the entry of herbal and synthetic skin cosmetics in the market (3). This review paper summarizes the evolution of the preparation of cosmetic products, hygiene tools, perfumes, and other personal care items throughout history in ancient China, India, and Egypt.

EYE CARE, MAKEUP, AND PLANT USED FOR EYE CARE

Eye care in ancient Egypt. Egyptians used to line their eyes and eyebrows with kohl eyeliner (4). In the early 20th dynasty (1187–1064 BCE) soot kohl was produced by burning the

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plant called qurtum (*Carthamus tinctorius*) and the moist powder was prepared and applied with the aid of a small bone or wooden rod (5).

Preparation of kohl: Kohl was obtained from burning aromatic resin, a species of frank-incense and shell of almond, which was made up of mainly galena, a mineral form of lead sulfide. The first kohl creation was a dark black shade used to protect the eyes from harmful sunrays and reduce eye infection and keeping the eyes healthier. The ingredient galena has disinfectant property (4).

Composition of kohl: The exact composition of kohl is a matter of dispute among the scientific committee. During ancient Egyptian days, galena was called by the name stim. Later the word was identical to Greek stimmi and Latin stibium, which means antimony, so some of the authors say antimony was the major ingredient used instead of lead sulfide. A research was conducted to determine the composition of kohl. The researcher analyzed 30 eye preparations (kohl), which were obtained from Egypt. Through the study, the researcher concluded that galena was the chief constituent and not antimony. Some of the authors say zinc oxide was probably used due to its sunblock property (6).

Eyeliner: Malachite is a green copper carbonate hydroxide mined from the Suez Isthmus and the Sinai and is frequently used as an eye-liner. Egyptians claimed that malachite prevented the water-borne eye infections, which is common along the Nile River (7). Women used to paint the underline of eyes and lids with green color made from malachite, which is a copper carbonate ore (8). Galena is a natural mineral form of lead sulfide. The grounded galena was mixed with natural resin and water. Prepared galena paste was kept in shell, vessels, or wrapped in leaves and was applied as black eyeliner (9).

Eye care in ancient India. Cosmetic use for protection and beautification dates backs to the Vedic and Puranic periods. In "Vedic Kala" the eye decorated with Anjana is said to be the best in every era (10). Anjana is a thick eyeliner/paste made up of herbs, which was also called collyrium. It is used to protect the eye and maintain eye health and vision. It is popularly called kajal in Hindi (11). In Rig-Veda, eye decorations with collyrium, beautiful garments, perfumed unguents, and flower garlands were mentioned [12).

Eye care in ancient China. Women used the soot derived from burning willow branches to paint their eyebrows during the Warring States period (475–221 BCE). Before Qin Dynasty (221–206 BCE) it was popular to have long eyebrows. However, during the Han dynasty (206 BCE–CE 220) women used to shave their eyebrows and drew new ones. During the Tang dynasty (CE 618–907), there were dozens of eyebrow shapes. Arched and thin eyebrows resembling a willow leaf or a moon were trendy (13).

HAIR CARE AND PLANTS USED FOR HAIR CARE

Hair care in ancient Egypt. Henna (Lawsonia inermis) has been used as a growth agent and was used in an ancient Egyptian treatment to treat hair loss. The occurrence of contact dermatitis due to the use of henna was extremely rare (Garcia, et al., 1997) because henna leaf extract has moderate antiallergic and anti-inflammatory activity (Dweck, 1997b) (14). Henna was prepared by drying leaves of henna and ground into a powder, mixed

with one of the liquids including water, lemon juice, strong tea, etc., and made into a paste and applied to the hair, nails, and palm for coloring (5). As early as 10,000 BCE in Egypt, both men and women were using dyes and paints to color the hair, skin, and body (1). The dye is a natural or synthetic substance used to impart color, with Chromosphere (responsible for the coloring) as the major component (15). The mixture of resin and beeswax was used to treat baldness and greying hairs (16).

Hair care in ancient India. Indians were using henna since the 4th or 5th centuries, in the art of mehandi or as a hair dye, especially before Hindu wedding (3). The art of applying henna to feet and hand is known as mehandi (17). Mehandi is derived from the Sanskrit word "mendhikā" while henna owes its origin to the Arabic name for "Lawsonia inermis" Hina (18). Henna is obtained from the Lawsonia inermis plant family Lythraceae, which contains Lawsone, a dye molecule. Henna is related to the hair proteins that tend to stain the color of the hair (19,20). Leaves of henna were dried and ground into a powder, mixed with one of the liquids, including water, lemon juice, strong tea, etc., and made into a paste and applied to the hair, nails, and palm, etc. (18). Some of the plants used as hair cosmetics are:

Reetha powder (Soapnut): Used for natural hair and body cleanser. Soapnut powder is also used to make a body exfoliant.

Shikakai (*Acacia concinna*): In the olden days, women were using the pod-like fruit to clean the hair. It is considered a superior cleanser for long hair and preventing dandruff and helps to promote hair growth.

Amla (*Emblica officinalis*): It is rich in Vitamin C, with the help of seeds and pulp, oil is extracted and used for the treatment of hair and scalp problems. Amla contains essential fatty acids that strengthen hair follicles (19,21). Calcium and tannins present in amla prevent hair from photodamage. Tannins are phenolic compounds that bind to keratin proteins of hair and prevent them from breaking (22).

Brahmi (*Centella asiatica*) contains sterols, flavonol, essential oils, glycoside, saponins, and triterpenoid, which is used for hair care formulations.

Eucalyptus (*Eucalyptus globulus*): Oil contains mainly cineole and a lesser amount of volatile aldehyde, terpenes, phenol, and alcohol. It shows very good results in scruff and chafes dandruff.

Gurhal (*Hibiscus rosa sinensis*): Hibiscus petal is used to stimulate thicker hair growth and to prevent hair loss, premature greying, and scalp disorders. Petals extract acts as a natural hair conditioner and can be used in hair washes.

Jatamansi (*Nardostachys jatamansi*): Jatamansi rhizomes are used in hair tonic preparations to encourage hair growth and to enhance blackness in hair.

Fenugreek (*Trigonella foenum graecum*): Fenugreek seeds are used to prepare hair care formulations, which help in hair growth, cure dandruff, and keep hair silky (23). One of the experiments conducted by the authors Gholamreza Dehghan Noudeh, et al. found that fenugreek seed helps in preventing hair loss and retain hair conditioning. Fenugreek seeds were extracted with 50% ethanol, freeze-dried, and processed in the fridge using the maceration process. Foam formation, pH, viscosity, conditioning, and wettability have been evaluated after the preparation of the formulation. The pH of formulated shampoo was found to be 6.6; this was shown to have high stability and foam due to the presence of saponin in fenugreek extract. The pH of formulated shampoo in the normal range was

found to be 6 to 8. The formulation has also shown thixotropic, foaming property, and viscosity. The wetting effect of shampoo was taken as 5 min (24).

Neem (*Azadirachta indica*): Neem oil is obtained from the seed, kernel, and leaves of neem, which is used as an antidandruff agent and hair tonic (23).

Oat (*Avena sativa*): Oat oil is lightly coloured, which is rich with glycolipids (polar lipids), as well as phospholipids, and free from fatty acids (Trans). The oil improves the elasticity of hair and skin. In skin and hair formulation, a 1–5% concentration is recommended (25).

Hair care in ancient China. Chinese people were using henna dyes to stain their hair (1).

SKINCARE AND PLANTS USED IN SKINCARE PREPARATIONS

Skincare in ancient Egypt. In ancient Egypt, appearance and personal health were of tremendous importance. The Egyptian climate required the moisturizing properties of fats and oils that could be used to produce fragrant salves or to produce cleaning agents mixed with ash and natron (26). Egyptians were using cleansing cream, which was made with animal oil or with vegetable oil mixed with lime powder. Scented ointments and oil were used to mask body odor and soften their skin (1). The most commonly used cosmetic material for hair and body were malachite, PbS, and galena, which was found in graves, stains on palettes, and stones on which they were ground for use (Lucas, 1930) (5). The word 'malachite' reflects the leaves green color of the plant family Malvaceae (7). The trendy skin color was black, obtained by applying a piece of linen to the neck, face and arms dipped in a yellow ochre suspension in water (8). Crushed lotus flower and oil from papyrus, honey were used for removing scars and marks from the skin (27). Rosemary (Rosmarinus officinalis L.), myrrh thyme (Thymus L.), lavender (Lavandula L.), chamomile (Matricaria L.), lily (Liliaceae), peppermint (Mentha L.), cedar (Cedrus libani A. Rich), rose (Rosa L.), aloe (Aloe barbadensis Mill.), and olive (Olea europaea L.), almond (Prunus dulcis Mill.), and sesame (Sesamum indicum L.) were the ingredients used in the preparation of oil and creams to protect from the sun and wind (28).

Skincare in ancient India. In the ancient period, a paste of Anjana (ayurvedic herbal collyrium) and Yastimadhu (Liquorice) was used externally as a cosmetic for cooling effect. During the Mahabharata period, the fragrant powder was used for the face and body (10). Indian women were using sandalwood and turmeric for skincare (29).

Aloe vera is used for cleansing purges for the body or skin and sunburn. Aloe vera inhibits the cyclooxygenase pathway and reduces prostaglandin E2 production from arachidonic acid. It is used in the form of soothing gels (20,21). Saffron is considered to be a beneficial herb for cleansing the skin by Indian physician Charaka. Herbs are used in cosmetics for the preparation of fairness cream, antiblemish lotions, and cleanser (30). Marigold (*Calendula officinalis*) is known as pot marigold. Ingredients of the flower are used for cosmetic, personal care products, skincare, anti-inflammatory, and antiseptic cream. Oat (*Avena sativa*): Oat oil is rich in essential fatty acids, antioxidants, and natural emollients, which are used in lotions, creams, facial oils, salves, and balms (31). Colloidal oatmeal formulation increases the moisturizing properties of skincare lotions and creams. The phenolic compound present in oil protects against ultraviolet light and provides anti-inflammatory and antioxidant properties. Phospholipids provide buffer and moistening activities, whereas saponins provide cleansing activity (25).

Skincare in ancient China. Creams and oils mixed with Chinese herbs are commonly used in modern and traditional skin formulations. By nourishing and hydrating at the cellular level, most herbs protect the skin through their antioxidant action and help minimize wrinkles (32,33). Some of the popular herbs used to protect the skin are: Fu Ling (Sclerotium poriae cocos) (Tuckahoe) It is a wood-decaying fungus or mushroom. Polysaccharides obtained from this are used in cosmetic preparations. It has an antioxidant property that protects the skin from free radical damage and oxidative stress. Polysaccharide extract has moisturizing benefits (34). Dang Gui (Radix angelicae sinensis) (Tang-Kuei- root) and Bai Zhi (Radix angelicae dahuricae) (Chinese angelica root) help in treating acne. One of the doctors named S. H. Guo has applied Baizhicuokang powder to treat 47 acne patients one time a day. After 6 mo of treatment 36 patients were cured, three patients failed to respond, 16 patients were mended, and the effective rate was 95%; no allergic reactions were found (35). Chuanxiong (Radix ligustici Chuan xiong) (Szechaun lovage root) helps in promoting blood circulations (32,33).

Plants used as skincare cosmetics are as follows:

Ginseng (Panax ginseng) and Paeonia (Paeonia suffruticosa) are most commonly used in China's personal care and cosmetic market. Ginseng and Paeonia have very good whitening actives and antiageing properties. White ginseng is used for whitening the skin (36). Paeonia root bark has antipigmentation ingredients and natural whitening activity (37). Liquorice root (Glycyrrhiza glabra) is used in skin irritation and preventing acne (38). Recently, the possible use of traditional herbal medicines (THM) to develop modern skincare cosmetics has been underlined (Kiken and Cohen, 2002). Kuo-Hsien Wang et al. experimented to determine the antityrosine effects of traditional Chinese herbal medicine (TCHM) used in skincare products (39). The authors picked 25 TCHMs and tested them as a skin-whitening agent for efficacy. They are- Asarum heterotropoides (Manchur wildginger) entire plant used, Lithospermum erythrorhizon (purple gromwell) - root, Pharbitis nil (Japanese morning glory) - seed, Trichosanthes kirilowii (Chinese cucumber) - root, Gentiana macrophylla - root, Elsholtzia ciliate (Vietnamese lemon balm), Leonurus heterophyllus (Chinese motherwort), Agastache rugosa (Korean mint) – entire plant, Prunella vulgaris (heal-all) – spike, Astragalus membranaceus (Mongolian milkvetch) – root, Glycyrrhiza uralensis (Chinese liquorice) - root and rhizome, Sophora japonica (Chinese scholar tree) flower, Spatholobus suberectus (Caulis spatholobi) – stem, Polygonatum odoratum (Solomon's seal) - rhizome, Cannabis sativa (Marijuana) - seed, Morus alba (mulberry) - leaves, Phytolacca acinosa (Indian pokeweed) - root, Paeonia suffruticosa (Moutan peony) - root bark, Crataegus pinnatifida (Chinese hawthorn) – fruit, Prunus persica (peach) – seed, Citrus reticulate (mandarin orange) – pericarp, Dictamnus dasycarpus (Densefruit dittany) – root bark, Houttuynia cordata (Chameleon plant) – entire plant, and Ampelopsis japonica (peppervine) – root, Amornum villosum - fruit. Collected TCHMs were pulverized with 50% ethanol solution and freeze-dried. Later, the extract was tested for cytotoxicity on human epidermal melanocyte; 12 extracts show low cytotoxicity, i.e., Lithospermum erythrorhizon, Pharbitis nil, Gentiana macrophylla, Glycyrrhiza uralensis, Sophora japonica, Spatholobus suberectus, Polygonatum odoratum, Cannabis sativa, Morus alba, Phytolacca acinosa, Citrus reticulata, and Amornum villosum were further examined for tyrosinase and melanin contents in human skin melanocyte. The authors used 1-dopa as a substrate to determine tyrosinase inhibitor effects. The extracts of Pharbitis nil, Sophora japonica, Spatholobus suberectus, and Morus alba showed potent tyrosinase inhibitor effects. The extract that showed tyrosinase effect does not show dose-dependent inhibition of melanin production. Sophora japonica and

Spatholobus suberectus showed antioxidant and phenolic content. Extracts of Pharbitis nil, Sophora japonica, and Spatholobus suberectus are likely to be useful for cosmetic products and applications (39). The major constituents of Aloe vera ("lu hui") are Aloin, ρ-coumaric acid, aldopentose, calcium oxalate, and polysaccharides. It is widely used in cosmetic products (40). Aloe vera is used in cosmetics products in concentrations varying from 1% to 98%; Aloe vera can be seen in the toiletry and cosmetic industry as a moisturizer. Aloe sugar mixed with essential oil makes an excellent skin smoothening moisturizer, toothpaste, sun lotion, shaving creams, deodorants, and prevents skin ageing by initiating the synthesis of elastin and collagen (41).

FACE CARE AND PLANT USED IN FACE CARE

Face care in ancient Egypt. Lucas (1930, p. 44) suggests face painting as the explanation of palettes and stains on stones synonymous with red ochre. These cosmetics contain fats or oils that were possibly used together with unguents (5). Ochre occurs naturally in soil and rocks. Once collected, ochre can be grounded with the help of pestle or mortar and turned into powder and finally mixed with the liquids and turned into paint (42).

Egyptian used to color the lips and cheek with lipstick consisting of reed holding a tiny piece of ochre at one end. Rouge lip-gloss was applied with a brush or spatula, consisting of red ochre and fat, probably with a little gull resin. The brush used for applying makeup was made of *Salvadora persica* tree (43). They used to treat the wrinkles by applying wax-based remedy containing gum, moringa oil (*Moringa oleifera*), ground Cyprus grass, and fermented juice, which was applied daily. Another recipe to remove wrinkles from the face is the gum of frankincense 1, fresh balarnites oil 1, wax 1, and rush-nut 1, which are grounded and put in the viscous fluid, which was applied every day. Make it and thou shalt see this may found its modern counterpart in a cold cream consisting of white wax, almond oil, borax, and stronger rosewater (44).

To treat the spot, the ostrich egg mixed with bullock's bile and milk was applied (45). Frankincense (individual experience allergic reaction when applied to the skin), acacia, fenugreek, and almond were used to prepare facial cosmetics (46). Honey and bees were important in Egyptian religion (47). Honey was dissolved with milk and used for daily face wash and to make the face smooth (42,48). Honey is composed of fructose and glucose but also contains fructooligosaccharides and amino acids, vitamins, minerals, and enzymes (47). Aromatic resin frankincense from trees of the genus Boswellia (Burseraceae) and fresh *Moringa olifeira Lam* (Moringaceae) were used to fight against wrinkles (16).

Face care in ancient India. Indian herbs and their importance are popular worldwide. Some of the plants and herbs used in face care cosmetics are as follows:

Turmeric (*Curcuma longa*) is a rhizomatous herbaceous perennial plant of the ginger family *Zingiberaceae*. Women apply the turmeric on the cheeks to obtain a natural golden glow. Tamarind (*Tamarindus indica*) belongs to the family *Fabaceae* that has antioxidant activity is appropriate for antiwrinkle cosmetics. Indian women were using herbs such as sandalwood for skincare, face packs, and masks from the olden days (19,20).

Face and nail care in ancient China. Chinese people used to stain their fingernails with gelatine, egg, and beeswax (1). Ceruse was made in China; its ancient and common name is hu-fen in China. Under the rule of the T'ang emperors, the Chinese used ceruse face

powder, which was accurately demonstrated by Harada, who observed that it was applied to the face and breast (49). Turmeric was used in China as a coloring material. Antioxidants in turmeric protect the skin cells from free radical damage. It is used for the treatment of acne, facial photo ageing, etc. (20).

PERFUMES

Perfumes in ancient Egypt. Kyphi is compound incense, a very popular Egyptian fragrance, which means "welcome to the Gods" (1). Kyphi is the best-known perfume of Egypt. It was made of 16 ingredients: cyperus, resin, myrrh, aspalatus, seselis, bitumen, mastich, rush, sorrel, cardamom, frankincense, and calamus. Ingredients were listed in the pyramid texts. Kyphi was a prized blend of incense in Egypt for its medical effects. The common resin used for making kyphi pellets was benzoin, which is a balsamic resin, a dried exudation from benzoin tree bark, used because of its fragrance (50). Incense is made up of aromatic material that produces scent, consists of 21% (by weight) of herbal and wood powder, 35% of fragrance material, 11% of adhesive powder, and 33% of the bamboo stick. Aromatic materials used to prepare incense were resins, barks, seeds, and flowers (51). Myrrh, incense, and cinnamon were used for deodorant preparations (27). Deodorant body rubs were made of an ostrich egg and tortoise shell roasted with gallnut from tamarisk tree (52).

Perfumes in ancient India. India was famous for using itra (similar to modern scent), made in sandalwood base, which was used during festivals, and its manufacturing process includes the collection, extraction, blending, and ageing of scent, which takes too much time for preparation (1). The most commonly used perfume was made from sandalwoods (*Santalum album*) to give a long-lasting odor (8).

Perfumes in ancient China. The Chinese used one word, i.e., heang, to represent fragrance, incense, and perfume. Heang was divided into six aesthetic moods: Tranquil, luxurious, beautiful, reclusive, refined, or noble (Keville, Green). China imported jasmine-scented sesame oil from India; Persian rosewater via the silk route, Indonesian aromatics such as ginger (Zingiber officinale), cloves (Syzygium aromaticum), nutmeg (Myristica fragrans), gum benzoin, and patchouli (Pogostemon cablin) via India (1).

HYGIENE

Hygiene in ancient Egypt. Egyptians used to freshen the breath by chewing the pallets made of tamarisk leaves (1). Instead of soap, they were using body scrubs of salt, honey, and natron for cleansing. Water and natron were used to wash the mouth. Natron, a chemical composition of two parts of sodium carbonate 10-hydrate and one part of salt, removes moisture from the body quickly and breaks down fatty tissues (46). The mixture of mint, pepper, rock salt, and dried iris flower was used to prepare toothpaste. Chewing the roots of Glycyrrhiza glabra L. (Fabaceae) boosts their breath (16), and chewing the herbs "frankincense" and "anise" improves the odor of mouth (46). The Aryan period witnessed the use of turmeric (Haridra), agaru (Agarwood is a fragrant tree), alkanet (Ratanjot), chlorophyll green (from nettle plants), and indigo (genus Indigofera, a flowering plant) for body decorations, and chandan for beautifications (53). The ancient Egyptians first produced a dental cream around 3000–5000 BCE containing powdered ashes from oxen hooves, eggshells, myrrh, and pumice mainly to remove debris from the teeth (54).

Hygiene in ancient India. In the olden days, Indian women did not use soaps but instead used a combination of grams of wheat husk flour combined with milk and turmeric germicidal creams. Wheat husk helps to remove dead cell tissues. Bathing cosmetic ubton is widely used in India even today (1). Ubton is a blend of Cicer arietinum (chickpea, a grain legume cultivated for its edible seeds), Curcuma longa (turmeric), and Santalum album (Indian sandalwood) used primarily for skin lightening and sun-protective properties (55). Betel leaves were used for darkening the lips. Saffron, agar, and chlorophyll green from nettle plants and indigo were used in body decorations (29).

Hygiene in ancient China. Around 1600 BCE, the Chinese were using twigs of the aromatic tree as a toothbrush and therefore freshened the mouth, as well as cleaning it. The first toothbrush was invented in China in CE1000, which had an ivory handle and bristles made from horse's mane. The first bristle toothbrush was also invented from China, which was made from hairs of the Siberian wild boar, which were fixed to a bamboo or bone handle (56). Chinese were using a detergent for bathing and cleaning, not soaps from ancient history. They were using tooth powder/toothpaste for cleaning their teeth. Major ingredients of tooth powder were ginseng, herbal mints, and salt (54).

TRADITIONAL CHINESE MEDICINE (TCM)

TCM is a clinical and evidence-based medical system that is used to treat various diseases; it has a history of more than 2,000 years in East Asian country. TCM mineral and herbal products are believed to be toxic but are still prescribed in the clinic (57). Nowadays TCM is used in dermatological related disorders and in atopic eczema, which proved resistant to orthodox treatment. The popularity of TCM produced fear about its uncertainty and toxicity about the ingredients. TCM natural products include material originated from animal, mineral sources, and scientifically it is impossible to determine which component shows synergic effects or antagonistic actions (58). Due to the absence of its systemic pharmacology and toxicology assessment, TCM is not approved as a medicine in the Western countries. Nowadays most doctors and scientists are involved in investigating the toxicity and pharmacology of the TCM. TCM processing is a pharmaceutical system that transfers the raw material into a form that can be used in decoctions via the use of various adjuvants, such as vinegar, honey. TCM processing makes a major contribution to the transition in chemical profile and the improvement in pharmacological effects and toxicity of TCM products (57).

CONCLUSION

Cosmetics are products that help in presenting and increasing the personality, beauty of human beings that has both medicinal and practical uses. The ancient science of cosmetology was founded in India and Egypt, but the earliest records of cosmetics and their application date back to the Indus Valley civilization, around 2500 and 1550 BCE. Ancient Egyptians started using cosmetics around 3500 BCE. Cosmetics alone are not sufficient to take care of the skin. It requires other ingredients to check the property of the skin. Plants and herbs have been used in cosmetic preparation since ancient times for simple remedies. Herbs that are used in China for cosmetics are widespread and these are biologically active for today's cosmetics. The most commonly used herbs in India

and Egypt were henna, saffron, sandalwood, and amla to enhance the beauty. Due to the increased demand for cosmetic products, the Indian cosmetic industry is growing rapidly. We can see that Indian companies produce cosmetic products both for the Indian market and for other countries, and there is a large possibility that it can become the largest beauty market in the world in the future.

REFERENCES

- (1) S. K. Chaudhri and N. K. Jain, History of Cosmetics, Asian Journal of Pharmaceutics, 3, 164-167 (2009).
- K. B. Patkar, Herbal cosmetics in ancient India, Indian J Plast Surg Suppl., 41(Suppl), S134–S137 (2008).
- (3) S. L. Chander, S. Ranganathan, and H. Trimbak, Study on the evolution of various ancient skin care practices into present day beauty care preparations, *Shodhganga*, Accessed 4 Feb 2020, (2017).
- (4) A. Tumlinson, Egyptian cosmetics: protection and adornment, Accessed 4 Feb 2020, (2017).
- (5) D. A. Scott, A review of ancient Egyptian pigments and cosmetics. J Stud Conserv., 16(4), 185–202 (2016).
- (6) Z. A. Mahmood, I. Azhar, and S. W. Ahmed, Kohl use in antiquity: effects on the eye. Toxicology in Antiquity, 17(3), 93–103 (2019).
- (7) S. M. Susarla, The colourful history of malachite green: from ancient Egypt to modern surgery, *Int J Oral Maxillofac Surg.*, 46(3), 401–403, (2016).
- (8) H. Butler, Poucher's perfumes, cosmetics and soaps, Res Gate., Volume 3, p 14-19 (2000).
- (9) A. A. Hassan and F. A. Hassan, Source of galena in predynastic Egypt at Nagada, *Archaeometry*, 23, 77–82 (1981).
- (10) K. Narender, G. Shweta, G. Satish, and K. Vipin, History of Indian concept of cosmetology—a review, Int J Appl Ayurved Res., 2(9), 1269–1274 (2016).
- (11) Y. S. Raghuram and Manasa, Anjana—collyrium types, method, uses, side effects, contra indications, (2018)
- (12) S. Bhagyashri and L. Vithalani, Concept of cosmetology in ancient India with special Sushruta Samhita, *Int AYURVEDIC Med J.*, 6(4), 893–896 (2018).
- (13) C. Cao, How cosmetics were created in ancient China, (2018).
- (14) T. Aburjai and F. M. Natsheh, Plants used in cosmetics, Phytother Res., 17(9), 987–1000 (2003).
- (15) E. N. Abrahart and J. B. Stothers, Dye, Encyclopedia Britannica (2019) Accessed 21 May 2020.
- (16) R. A. Dennis and A. G. Mans, "A thing of beauty is a joy forever". Plants and plant-based preparations for facial care in Suriname, *Clin. Med. Invest.*, 2(4), 1–16 (2017).
- (17) R. Parmar, History of mehndi—history of henna, Accessed 5 Feb 2020, (2013).
- (18) A. Gupta, The history of bridal mehandi: how the tradition came to be, Accessed 3 Mar 2020, (2018).
- (19) S. Gediya, R. B. Mistry, U. K. Patel, M. Blessy, and H. N. Jain, Herbal plants: used as a cosmetics. *J. Nat Prod Plant Resourse.*, 1(1), 24–32 (2011).
- (20) R. S. Pal, Y. Pal, N. Saraswat, P. Wal, and A. Wal, Current review on herbs for derma care, *Open Dermatol. J.*, 13, 41–46 (2019).
- (21) P. Shivanand, M. Nilam, and D. Viral, Herbs play an important role in the field of cosmetics, *Int. J. PharmTech. Res.*, 2(1), 632–639 (2010).
- (22) A. Gupta, 5 reasons why amla is perfect for anyone looking for stronger, thicker hair. Accessed 4 Apr 2020, (2020).
- (23) A. Gupta, R. Malviya, T. P. Singh, and P. K. Sharma. Indian medicinal plants used in hair care cosmetics: a short review, *PHCOG J.*, 2(10), 361–364 (2010).
- (24) G. D. Noudeh, F. Sharififar, P. Khazaeli, M. Ehsan, and J. Javad, Formulation of herbal conditioner shampoo by using extract of fenugreek seeds and evaluation of its physicochemical parameters. *African Journal of Pharmacy and Pharmacology*, 5(22), 2420–2427 (2011).
- (25) K. Robards, P. Prenzler, D. Ryan, and K. A. Afaf, Oat oil. Gourmet and health-promoting specialty oils, *AOCS Press* 1st Edition, 433–454 (2009).
- (26) D. D. Depietro, Cosmetics, Egypt, Wiley Online Libr., 2 (2012).
- (27) J. J. Mark, Cosmetics, perfume, & hygiene in ancient Egypt, World History Encyclopedia, Accessed 2 May 2020, (2017).

- (28) J. G. M. Francisco and B. D. Luis, The use of plants in skin-care products, cosmetics and fragrances: past and present, *MDPI*,; 5(3) (2018).
- (29) A. Fathima, S. Varma, P. Jagannath, and M. Akash, General review on herbal cosmetics. *Int J DRUG Formul Res.*, 2(5), 140–165 (2011).
- (30) R.B. Saudagar and M. H. Sisodiya, Review on herbal cosmetics, World J Pharm Res., 7(7), 573-591 (2018).
- (31) K. Sumit, S. Vivek, S. Sujata, and B. Ashish, Herbal cosmetics: used for skin and hair, *Res Gate*, 4, 1–7 (2012).
- (32) E. H. Schafer, The early history of lead pigments and cosmetics in China, *T'oung Pao*, 44:413–438 (1956).
- (33) K. Othmer, Kirk-Othmer Chemical Technology of Cosmetics, Wiley (2012).
- (34) F. Ling, Poria cocos extract, Accessed 20 Apr 2020.
- (35) M. T. Soo, Y. X. Sheng, H. W. Yan, and Y. Q. Xiao, Comprehension and experience of acne treated with traditional Chinese medicine facial mask of Bai Zhi(Radix angelicae formosanae) and Bai Fu Zi (Rhizoma typhonii gigantei) as the basis formula by external application, *Chinese Medicine*, 3, 87–93 (2012).
- (36) X. Jin, L. Y. Zhu, H. Shen, J. Xu, S. L. Li, X. B. Jia, C. Hao, C. Bao-Chang, and Y. Ru, Influence of sulphur-fumigation on the quality of white ginseng: a quantitative evaluation of major ginsenosides by high performance liquid chromatography, *Food Chemistry*, 135(3), 1141–1147 (2012).
- (37) D. Ally, TCM in cosmetics: back to the future, Happi, Accessed 12 May 2020, (2013).
- (38) T. Aburjai and F. M. Natsheh, Plants used in cosmetics, Phytother Res., 17, 987-1000 (2003).
- (39) K. H. Wang, R. D. Lin, F. L. Hsu, Y. H. Huang, H. C. Chang, and C. Y. Huang, Cosmetic applications of selected traditional Chinese herbal medicines, *Journal of Ethnopharmacology*, 106(3), 353–359 (2006).
- (40) K. K. H. Tan and J. Vanitha, Immunomodulatory and antimicrobial effects of some traditional chinese medicinal herbs: a review, *Current Medicinal Chemistry*, 11 (11), 1423–1430 (2004).
- (41) V. C. Efterpi and C. F. Panagiota, Aloe vera: a plant for many uses. *Journal of Food, Agriculture & Environment*, 8(2), 245–249 (2010).
- (42) L. Geggel, Ochre: the world's first red paint, Live Science, Accessed 15 May 2020, (2018).
- (43) H. Eid, Cosmetics, Accessed 12 Apr 2020, (2016).
- (44) R. J. Forbes, Studies in Ancient Technology, Leiden, Vol. 3, (1965).
- (45) F. Blanco-Dávila, Beauty and the Body, the origins of Cosmetics in Plastic and Reconstructive Surgery, History of Cosmetics, 105(3), 1196–1204, (1998).
- (46) E. El-Kilany and E. Raoof, Facial cosmetics in ancient Egypt, Egypt J Tour Stud., 16, 19 (2017).
- (47) T. E. Oskouei and M. Najafi, Traditional and modern uses of natural honey in human diseases: a review, *Iran J Basic Med Sci.*, 16(6), 731–742 (2013).
- (48) L. Sagrillo, Bees and Honey, in Oxford Encyclopaedia of Ancient Egypt, Edited by Donald Bruce Redford, Volume 1, 172–174 (2001).
- (49) Ancient Chinese make up, 2014. Accessed on 15 May 2020, (2014).
- (50) G. T. Renata, Incense as a trans disciplinary vehicle in ancient Egypt and Christianity. Similarities and Differences, p 170–176, (2007).
- (51) L. Ta-Chang, K. S. Guha, and C. S. David, Incense smoke: clinical, structural and molecular effects on airway disease, Clin. Mol. allergy, 6, 3 (2008).
- (52) K. Laden, Antiperspirants and deodorants, cosmetic science and technology series. New York, Marcel Dekker, (1999).
- (53) K. V. Giridhara and D. M. Basavaraja, Consumer behaviour towards ayurvedic cosmetics in Chikmagalur district with special reference to Himalaya ayurvedic concepts, *Shodhganga*, p 342, (2008).
- (54) F. Lippert, An introduction to toothpaste—its purpose, history and ingredients, *Monogr Oral Sci.*, 23, 1–14 (2013).
- (55) R. Rupani and A. Chavez, Medicinal plants with traditional use: ethnobotany in the Indian subcontinent, *Clinics in Dermatology*, 36(3), 306–309 (2018).
- (56) G. Gurudath, K. V. Vijayakumar, and R. Arun, Oral hygiene practices: ancient historical review, *Journal of Orofacial Research*, 2(4), 225–227 (2012).
- (57) R. Liu, X. Li, N. Huang, M. Fan, and R. Sun, Toxicity of traditional Chinese medicine herbal and mineral products, *Advances in Pharmacology*, 87, 301–346 (2020).
- (58) K. Chan, Progress in traditional Chinese medicine, *Trends in Pharmacological Sciences*, 16(6), 182–187 (1995).