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SCENTED LEGENDS: A JOURNEY OF PERFUMERY FROM MYTH TO ANTIQUITY

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Abstract: *The use of cosmetics has left a distinctive mark on civilizations across the ages. Whether in the burial of the deceased, religious ceremonies, or daily life, cosmetics have played a pivotal role in preserving health and enhancing beauty. The term "cosmetics" finds its origins in the Greek word "κοσμεῖν" (pr.cosmin), signifying adornment and decoration. Throughout history, the application of cosmetics has not only reflected the evolution of societies but has also conveyed information about social hierarchies, health progress, and societal ideals of beauty.*
Keywords: *Cosmetics, Beauty enhancement, Cultural evolution, Societal status, Health preservation*

1. Introduction

Cosmetics' presence has been noticeable in all civilizations. They have been used in various forms and in many different circumstances, such as the burial of the dead and religious rituals but also in everyday life with the aim of preserving health and amplifying beauty. The word "cosmetics" comes from the greek word "κοσμεῖν" (pr.cosmin), that means adorn, decorate.
Cosmetics' use was an indication of a civilization's evolution throughout the centuries, exhibiting social statuses within the society, health advancements as well as their perception of beauty. [1]
"Cosmetic products" have been defined by the European Directive 93/35/EEC (European Commission, 1993) as "any substance or preparation intended to be placed in contact with the various external parts of the human body (epidermis, hair system, nails, lips and external genital organs) or with the teeth and the mucous membranes of the oral cavity with a view exclusively or principally to cleaning them, perfuming them, or protecting them in order to keep them in good condition, change their appearance or correct body odours". [2]
"*Perfume*" is derived from the Latin word "*per fumum*" which was used to describe scented mixtures *through smoke*, as the earliest fragrance production was based on burning aromatic herbs and incenses at religious gatherings. [3] Additionally, the term "perfume" can describe the oily extract of plants.
In antiquity, scents were universal; their usage was commonplace in ritual and celebratory situations, religious sacraments, marriages, funerary ceremonies and festive dinners "symposia". Perfumes were used by athletes, aristocrats, politicians, and royalty; they served as medicinal agents or as a means of relief against lung and skin ailments. From scented oils used to adorn the body to incense burnt at homes and temples, perfumes were a significant part of rituals, beauty, and commerce in the ancient world.

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The earliest use of perfume, with the form of incense, was detected in Mesopotamia. Ancient cultures burned various resins and woods throughout their ceremonial and religious activities. They used to soak the fragrant woods and resins in water and oil, and rub their bodies with the liquid. [5] Other uses included making salves and ointments for ornamental or medicinal purposes as well as perfumes to embalm the dead, preparing them for their final journey. [4] Incense made its way to Egypt around 3000 B.C. and under the leadership of Queen Hatshepsut, became very popular among the Egyptians. [5]
The Egyptians used a variety of herbs and plants to produce perfumes. Some of these plants, such as iris, were of great importance. They attributed specific symbolisms to this plant, such as power and other virtues, thus it was used by their kings while iris parts were placed on the face of Sphinx.
Egyptian perfumery was famous across the Mediterranean. Pliny described a perfume which conserved its full fragrance after eight years. [7-8]
Dollinger referring to Lichtheim in his work informs us that the Egyptians, during New Kingdom, carried little cones in their hair, which had been made of solid perfume and scented for a long period (Fig. 1). [7,9]

Figure 1: Perfume cones. Adapted from
Variations of the perfume cone were used by both the ancient Greek and Roman ladies. They hided perfume unguents in their hair, to preserve a pleasant aroma for many hours, in order to attract men's attention when passing by. [8]
In Greece, according to the Homeric tradition, Olympian gods taught the use of perfumes to people, while in mythology we find many stories that attribute the creation of herbs to Goddesses and Nymphs. From Pinckernelle's reference to Ovid it is depicted that one day when Aphrodite was bathing on the banks of a lake, she startled by the presence and aggressive attitude of satyrs, she fled, hid behind bushes of myrtle and thus was saved. The gratitude of the goddess attributes to the perfume of myrtle. Thus, the myrtle became a symbol of Venus and marriage as well. [10]
Ancient Greeks attributed great importance to health, beauty, power and harmony of the human body. Their cultural, aesthetic and sociological approach to human body was reflected on their art and substantially on their perception during history. Perfume use was a part of Greek social/hospitality and cultural practices. Potter & Dunbar refer to Athenaeus who acknowledges that Homer heroes in Iliada hardly ever used costly ointments «μύρα» except for Paris who was portrayed with more soft and effeminate attributes while in Odyssey, Helen informs Telemachus about the visit of Odysseus in Troy

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"But when I had bathed him, anointed and clothed him, and solemnly sworn not to name him in Troy as Odysseus before he reached camp and the swift ships, he revealed the Achaean plans." [11,12]
Alexander the Great's invasion of Egypt in the 3rd century BC, favored the perfume trade from the East and made incense even more widespread in Greece. The Greeks obtained new fragrances and cosmetics from there. The perfume industry reached its heyday in Ptolemaic Egypt. Theophrastus discussed the various carriers of scents, the essential oils and their plant origins, and even the effect of various scents on our moods and thinking processes. Moreover he researched how scent is perceived, and noted the connection between the perception of odors and taste. [5]

Following Egyptian advancements, ancient Greeks evolved the art of cosmetics and perfumes creation while developing and promoting their trade. They separated perfumes in three categories; viscous, solids (ointments) and the more liquid ones (oils). The verbs used respectively were "suffuse" and "coat", while the verb "xeraloifein=ξηραλοιφεῖν" * was used to describe the hand smearing on dry body surface. [13] Aromatic oils were characterized as odorous. The quality and the quantity of a perfume were used as social markers.

* ξηραλοιφεῖν ἔλεγον τὸ χωρὶς λουτρῶν ἀλείφεσθαι

The *process of cosmetics' conception* was usually based on a complex chemistry, involving chromatic and/or different chemical effects, resulting in the creation of desirable compounds. The principles of mixing, according to classical sources, run back to the Mycenaean world and especially to Pylos, as discovered in documents of Linear B. [15]
According to Theophrastus, perfume production was categorized by the method used. Those that were obtained by mixing solids with solids (method for producing aromatic powders) and those that required mixing solids with liquids (method which was followed by perfumers) and was associated with the production of all perfumes and ointments. Theophrastus furthermore highlights the oil factor. Generally, it is difficult for the oil to absorb perfume, because of its greasy nature. Sesame and olive oil were the hardest ones concerning the acquisition of an aroma. The most common was the balanus oil (myro) from Egypt or Syria, because of its viscosity. The olive oil used to produce such products was «omphakinon» obtained by thick raw olives. [16-17] According to some researchers, the best oil used for the ointments was that of bitter almonds. Generally oils were the most susceptible, lasted more and were more consolidated with the rest ingredients, producing a homogeneous substance. [17] According to Pliny the herbal oils used, except omphakinon, were oils produced from the grapes gathered in mid-summer including the almond and balanus oil. He also describes the oil production method from aspalathos, phragmites, balsam, iris, cardamom, marjoram, the root of cinnamon etc. [8] Observation and empirical knowledge of the olive oil's (omphakinon's) effectiveness gathered throughout the centuries established the basis for realizing the value if its antioxidant properties.

A variety of spices was used for fragrance preparation; to thin the oil, to better absorb the flavor or to enhance their natural aroma. Theophrastus refers to spices used for perfume manufacturing. The selected spices were all dry, hot, astringent and scathing or bitter, like iris, myrrh and frankincense. Some perfumes acquired their styptic properties without direct exposure to flames; the fragrance was heated through the use of water avoiding the risk of incorporating burnt smell. Those perfumes, which were exposed to fire, were first dived either in flavored wine or in water. Alternate processing included

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cold processing but in general, the perfume obtained a more complete odor by exposure to fire, than in cold condition. For the fragrance of iris, the root was used in dry condition, without fire. The virtue of the fragrance was much more highlighted in that way. Often when perfumes were steeped first, they absorbed less, their virtues were significantly lost and they became astringent. Aromatic herbs' gathering was highly depended on their maturing season. All perfumes from flowers had a short lifespan, with their best fragrance quality reached within two months of the production followed by a quick decomposition, but those from roots had a stronger odour and lasted more. The ancient perfumes faded when exposed to heat and direct sunlight.

As a result, they were stored in shady rooms, lead pots or alabaster bottles. [17]

Theophrastus, Pliny and Dioscorides deliver various recipes for perfumes. Theophrastus refers to ways of coloring perfumes and ointments. The dye used for red perfumes was alkannet from the plant Anchusa *officinalis L* (borage), while the sweet perfume of marjoram was painted with a dye called "chroma (=colour)", a root imported from Syria. According to Theophrastus the quantity of raw materials combined was directly relevant to the quality, complexity and distinctiveness of the produced flavor. In mixed perfumes the targeted scent came as a result of all the ingredients together rather than having a dominant one. Thus during the perfume production, the vessel was opened and the item whose scent dominated was removed, while small doses of less dominant materials were added. In the whole process of composite aromas' production, the spices used were moistened with aromatic wine. In this way, they produced aromas with longer duration. Generally between all aromas used, the one added in the end was the most dominant.

Thickening perfumes and ointments was achieved by heating the oil and spice in a water tank, adding resin and gum. Aromatic wines, water and honey also played an important role in the final composition of perfumes and ointments. Lanolin was used only from Pliny's time onwards, mixed with honey as an ointment to remove stains from the face.

There are numerous recipes and depictions of the perfume preparation in numerous ancient temples all over the known world. [9] Aroma use was spread from Greece, to Rome (Fig.2, Fig.3) and later to the Islamic world.

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Figure 2: Ancient roman utensils to cosmetics' preparation. Adapted from [18]

Figure 3: Roman perfume bottles (unguentari) on display at Villa Boscoreale. Adapted from [19]

Giuseppe Squillace has translated the "De odoribus" by Theophrastus where he mentioned his knowledge about the perfumes and scents around the
Mediterranean world; from Lydia to Athens, Egypt and Syria.

Fragrances (raw materials) were mainly imported from the East to be processed, refined and produce final ointments and perfumes, as concluded from Attard's reference to Launert's work. [21] A common product was *muron*, a liquid or semi-liquid perfume from vegetable oil (olive, almond, sesame oil etc) with an astringent agent, to improve the ability of the oil to absorb and enhance smells of scented elements (mainly from plants, such as petals, leaves, roots, resins). [14] The ancient Greeks and others imported as well perfumes from the East. The most known were "vrentheion", the famous Lydian perfume smelling musk and lavender, which was manufactured in small pots, "susinum", the aromatic oil of lily of Susa, "Mendesian" (myrrh and cassia with assorted gums and resins) from the ancient city

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of Mendes near Nile, from balanus oil flavored with bitter almond oil from Egypt, known as "metopion", and several other ingredients.

Also from the 6th century already, they imported palm oil from Naucratis of Nile, lily, lotus and dill from Egypt and silphium from Libya, of which they manufactured drug, pharmaceutical ointments, as an antidote against poisonings.

In antiquity perfumery constituted an independent sector that required virtuosity, inventiveness, but also the essential privacy. There you could find herb gatherers preparing cosmetics known as "pharmakis" or "pharmakides" [24], "aleiptes", specializing in the application of perfume and other cosmetic goods (perfumes, ointments, incenses, etc) on human body as well as "Paidotribes", experts in oiling and anointing the athletes' body, as concluded from Cosentino's reference to Yalouris and Harris. [25] The use of oil by athletes is described by Dioscorides as well (Fig.4).

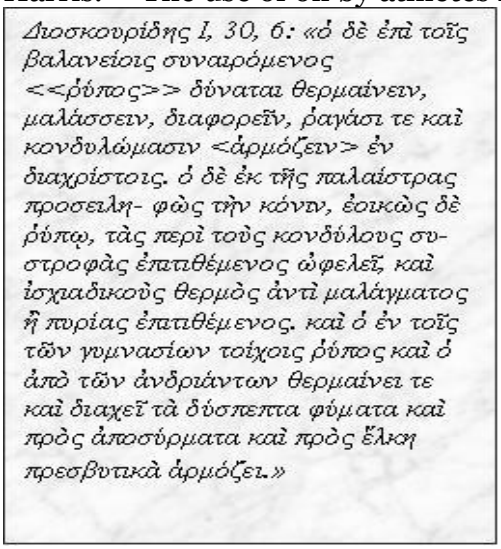
Διοσκουρίδης Ι, 30, 6: «ὁ δὲ ἐπὶ τοῖς βαλανείοις συναιρόμενος <<ῥύπος>> δύναται θερμαίνειν, μαλάσσειν, διαφορεῖν, ῥαγάσι τε καὶ κονδυλώμασιν <ἁρμόζειν> ἐν διαχρίστοις. ὁ δὲ ἐκ τῆς παλαίστρας προσειλη- φὼς τὴν κόνιν, ἐοικὼς δὲ ῥύπῳ, τὰς περὶ τοὺς κονδύλους συ- στροφὰς ἐπιτιθέμενος ὠφελεῖ, καὶ ἰσχιαδικοὺς θερμὸς ἀντὶ μαλάγματος ἢ πυρίας ἐπιτιθέμενος. καὶ ὁ ἐν τοῖς τῶν γυμνασίων τοίχοις ῥύπος καὶ ὁ ἀπὸ τῶν ἀνδριάντων θερμαίνει τε καὶ διαχεῖ τὰ δύσπεπτα φύματα καὶ πρὸς ἀποσύρματα καὶ πρὸς ἕλκη πρεσβυτικὰ ἁρμόζει.»

Figure 4: Dioscorides refers to the use of oil by athletes. [26]

Verbanck-Piérard and Massar refer to Athenaeus in their work, informing us about the terms "*technè murepsikè"* and "*murepsos" or "murepsikos"*. [14] Professional perfume productions was exercised by the murepsos or murepsikos. The perfume makers confected drugs, poisons, cosmetics according to murepsike techniques, while the "myropoles /muropolai" and "migmatopoles" traded their final products. They imported perfumes and got their supplies from local and foreign murepsoi. [14,16] Famous perfume sellers in historical times include Peron and Athenogenes, as mentioned in Verbanck-Piérard's and Massar's reference to Athenaeus and Hyperides.

The later had three perfume shops in Athenian Agora.

In Greece, the *first perfumery workshops* were excavated in the Minoan palace (15th cent.) of Zakros in Crete and the Mycenaean palace of Pylos. Citizen of Pylos in the Late Bronze Age had a variety of herbs, spices and flowers available to them. Especially in Nestor's Palace in Pylos (13th cent.), perfume production was developed as indicated by relevant document archives. [27] In the Minoan and Mycenaean civilization many "myrepseia", places where beauty products, ointments and perfumes were manufactured, must have existed. [24] Moreover in Chamalevri (West Crete), and Apodoulou there has

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been found evidence of distillation and aromatic production. It may be noted that perfume production existed in Chamalevri even before 2000 BC. Findings of important ingredients such as anise, carnations, beeswax, honey, olive oil, resins (i.e. *pistacia terebinthus* tree) and iris oil were detected. Ceramics (bottle and jars) were decorated with iris plant the symbol of Juno (Hera). [28]

Ancient authors such as Athenaeus, Hippocrates, Xenophon, Herodotus, Aristotle, Theophrastus and others, provide details regarding the ancient aromas from flowers. Those either took their names from the herb they were originated or the name of their manufacturer. The "Megaleion" (=splendor) for example, famous perfume of Ephesus, was named after Megallus from Sicily. The *most famous ancient Greek perfumes* were Irina, Nard, Balsam, Stacte, the authentic balsam of myrrh, Melinum from quince oil, Rhodium, a famous ointment from Rhodes consisting of rose extract along with other essence oils, Tylis oil and others.

Irina was produced from the roots of iris, after being cut, spread out in the shade and dried up passed in threads. The Irina fragrance was easy to manufacture, with simple components and the addition of olive oil or Egyptian balanus, having an odor that improved over time. It was a popular and relatively cheap perfume.

Nard was produced from the root of Indian spikenard; it had a fine durable aroma. The best nard was produced in Tarsus of Cilicia. It was an essential component of female toilet and was also used in flavouring wine, but also in making pastilles for fresh breath.

Stacte was an expensive and luxurious aroma, bitter and scathing, imported from the East, from the oil of myrrh bush. It was well known to the Greeks of Asia Minor, while its name indicates the way of its preparation, via seepage of the precious liquid of myrrh, when the stem and branches of myrrh were carved. The harvest took place during the hottest days of the year and lasted quite a while. Myrrh was used for the preparation of liquid perfumes, ointments, pastilles, incenses and perfumed wines, and as a component of various complex perfumes or for the enrichment of cheaper oils. 8,17,22

Balsam is a plant that flourished in Arabia and the Levant and was soughtafter for its medicinal and cosmetic uses. It was an expensive and rare raw material used as well as a flavoring foodstuff, or as an ingredient of other fragrances. As it was said, a drop of balsam was enough to flavor a whole room.

Many cities were inextricably connected to the production of certain perfumes and ointments, such as Cyzicus, famous for the fragrance of iris, Kos for the aroma of marjoram and apples, Phaselis for its rose etc.

The Minoans exploited the rich Cretan vegetation for perfume preparation. Evidence found at Knossos listed a few species; "kommeorritini" (a natural mixture of gum and resin), seeds and aromatic oils derived from plants such as Coriandrum *sativum L*, Cyperus *rotundus L*, sage, Crithmum *maritimum L*, Pistacia *lentiscus L* variation chia, Pistacia *terebinthus L*, and Foeniculum *vulgare Mill* (fennel). The most important plant of Crete was the Cistus *creticus L* whose resin was used in incense, in therapeutic ointments, and the red dye of perfumes. Another famous plant was dictamus (Theangelis – Origanum dictamus L), a typical plant of Diktaean Mountains, producing oil with tonic and stimulating properties. Other raw materials included crocus, lily, iris, myrtle, marjoram, flowers and fruits of quince (Cydonia *oblonga Mill.*), fennel, dill, coriander as well as the resin of wild quince, cedar, cypress and Pinus *halepensis Miller*.

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Archeological findings around the world demonstrate the use of various vegetable, animal and mineral products to make perfumes, cleansing and beautifying agents for the skin and scalp. The use of aromatic oils in the production of aromatic preparations was widely known in ancient times, as mentioned in Homer and in Bible. Other excavated evidence, in ceramic tablets found, exhibit the process of treating, storing and allocating olive oil in order to be used in the perfume industry. In Pylos and Mycenae the materials used in perfume production were similar to those of the Minoans, while the most important Mycenaean perfumes came from sage, rose, Cyperus rotundus and the dye "ertis". [27] The Mycenaeans used rose adorned oil in order to enhance their social status and beauty and to cover the body odors of daily life. [27]

Due to an absence of archaeobotanical data, the rose species used in their perfume can only be assumed; Greek species such as R. *canina L.*, R. *gallica L.,* R.*rubra,* A. *alba L. and* R. *centifolia L.* belonging to the southern European zone, are hypothesized to have been the source materials, as concluded from Cuyler's reference to Goor. [27,30] Aromatic oils and creams were offered to gods and were used in funeral ceremonies. [31] Information about Mycenaeans' grooming products, raw materials, their production, storage, trading and usage is drawn from the Linear B.

The Athenian citizens of the classical period appreciated fragrances, but not the intoxicating scents of East that reminded of the Persian, Lydian opulence that was considered inappropriate for the Greeks. The exotic scents of the East were described by Theophrastus, philosopher, botanist and author of the book "On Odour".

Smell holds the third place in the Aristotelian system of the five senses, following the cognitive senses of sight and hearing. The smell has multidimensional properties; from the emotional dimension of pleasant or unpleasant, to the cultural dimension of fragrance and odor rules and the social dimension of human contacts.

One of the most important sources of information about the Athenian odor culture (500BC) is the text "Deipnosophistai" of Athenaeus from Naucratis, in which, details of Athens' everyday life are described. Source of the text is the Byzantine code from the library of Constantinople which appeared in 1423 in Venice. [32] It is also referred that rich civilians adorned themselves with wreaths of ivy, laurel, myrtle, conifer, celery, dill, mint, roses, violets and other flowers. The wreaths were additionally baptized in aromatic oils and they believed that their fragrance acted against headache, dizziness, and halitosis and ingestion disorders.

Neatness was in force at residential areas in Athens. Several fragrances were used in rooms and lockers, such as lemon, apple of Hesperides, peach and apple Persian, to protect clothing from moths and insects. [31] Excessive fragrance was, on one hand, regarded as vain, but was also provided a positive influence in everyday life 8 , 33

Aristotle in "Nicomachean Ethics" considered that Graces, who followed Venus, contributed to people's social contacts, while Aristophanes ridicules the diffusible myrrh of Graces. [33,34] In general excessive use of perfumes, ointments and cosmetics (the coquetry of Venus, the Graces and Adonis), is often an object of mockery in comedies. Xenophon in his work "Oikonomikos" refers to Ischomachus' young wife's mania of beautification. [35]

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During the Excavation in Zakros palace of Crete, Koehl (1981) found many vessels containing perfume remnants showing that Minoans had developed and placed importance in the science and art of perfume making.

In these myrepseia, there were numerous vessels, cups, bowls, sharing vessels, jag like vessels, wide mouthed tubby vessels found, but also whole series of braziers, censers ie with a perforated leg and an opening for the placement of charcoal, ovens, pot caps, filters (strainers), tripod cooking pots, clay rack, utensils wholly used for the preparation of aromatic herb extracts. Generally the *utensils* used for the production of cosmetics and perfumes were:

- The mortars and pestles for shredding or grinding fruit or for processing other materials, such as crumbling inorganic materials for paints
- The basins for wine or oil production
- The asaminthos, i.e. the tub for soaking the flowers in water, oil or fat for the extraction of their aroma
- The kettles for boiling oil in order to prepare the perfume
- The perfume bottles, the vessels in which they packaged the finished product and which had several shapes, names, and decoration
- The censers, called braziers or ovens.

Most perfume containers share some characteristics: narrow neck and opening, wide flat-rimmed or funnel shaped mouth. The most are quite small. According to Verbanck-Piérard's and Massar's reference to Rasmussen the chosen decorative images on perfume vases referred to the exotic origin of their contents. The oriental sign decoration of proto-Corinthian vases (Fig.5) could inform about the real or supposed Near-Eastern origin of their contents.

Figure 5: Proto-Corinthian aryballos, Royal Museums of Art and History, Brussels, inv. A2 (© Royal Museums of Art and History, Brussels) Adapted from [14]

Many ethnopharmaceutical studies have focused on domestic cosmetics and cosmeceuticals based on tradition and folk history. Home-made phytocosmetics' recipes are usually based on orally transmitted

folk and heritage based knowledge as well as on popular phytotherapeutical tradition. Pieroni et al., recorded cosmetic or cosmeceutical recipes based on more than 70 botanical species together with selected animal and mineral ingredients. Many of the used species represented well-known medicinal plants of the European phytotherapy, exerting phytopharmacological potentialities. [36]

Perfumes in ancient times were synthesized empirically and glycerides were used to fix the fragrance. In Mesopotamia and Egypt the final perfume product came from various oils' (eg. sesame, horseradish, almond and olive oil's) extraction and press. On the contrary, modern scents are manufactured by fractionated organic material or alcoholic distillation. [37] The invention of true alcoholic distillation took place in the 14th century. The first documented named perfume in history, Hungary Water, was manufactured for Queen Elizabeth of Hungary about 1370, as mentioned by Attard's reference to Launert.

It is impressive how the perception of beauty had an impact on social status in all civilizations and cultures throughout the centuries. Perfumes correcting body odors and affecting people's psychology, constituted one of the most significant cosmetic products. Thus perfumeries represented a market developed strongly enough to promote their products as luxury items in order to satisfy people's esthetic needs.

References

A History of Cosmetics from Ancient Times. http://cosmeticsinfo.org/Ancienthistory-cosmetics

Lord Slynn of Hadley, Lord Steyn, Lord Hope of Craighead, Lord Clyde, Lord Hutton. Judgments - Optident Limited and Another (Appellants) v. Secretary of State For Trade and Industry and Another (Respondents).UK.http://www.publications.parliament.uk/pa/ld200102/ldjudgmt/jd010628/op tid-1.htm

How Fragrance Affects You: A Brief Scent History . Wow Experience. 16phttp://www.niche-reports-resource.com/reports/HowFragranceAffectsYou.pdf

Temperance, E. Making Ancient Perfumes. 2014 Jan 22 In: Baring the Aegis. http://baringtheaegis.blogspot.gr/2014/01/making-ancient-perfumes.html

Perfume in Ancient Life . http://www.perfumes.com/eng/history.htm Grieve, M. A Modern Herbal 1995 https://www.botanical.com/botanical/mgmh/i/irises08.html

Dollinger, A. Ancient Egypt: Personal Hygiene and Cosmetics 2000 [updated 2013 Apr.] http://www.reshafim.org.il/ad/egypt/timelines/topics/cosmetics.htm

Bostock, J. (ed). Pliny the Elder, Historia Naturalis (ca. 77 AD) [Perseus Digital Library trans. & Aspria, M. adaptation]. London: Taylor and Francis; 1855.

Hill, J. Perfume In Ancient Egypt. http://www.ancientegyptonline.co.uk/perfume.html

Pinckernelle, K. The Iconography of Ancient Greek and Roman Jewellery. Glasgow: University of Glasgow, History of Art Department; 2005

Potter, J. Archaeologia Graeca, or the Antiquities of Greece. 8th ed. London: A.Wild; 1764. Vol.II, p 373

Kline, A.S. (trans.) Homer: The Odyssey. 2004 Book IV, p. 220-289 Dindorf, W. (ed.) Harpocration Valerius, Lexicon in decem oratores Atticos. Oxford: Oxonii: E Typographeo Academico; 1853. https://creativecommons.org/licenses/by-sa/3.0/us/

Verbanck-Piérard, A., Massar, N. "Follow the Scent... Marketing Perfume Vases in the Greek World", in Tsingarida, A. and Viviers D. (éd.), Pottery Markets in the Ancient Greek World (8th -1st centuries B.C.) at Proceedings of the International Symposium held at the Université libre de Bruxelles 2008 Bruxelles: CReA-Patrimoine; 2013 Available from academia.edu

Zaitoun, C. The process of cosmetic adornment. Similarities between Mycenaean prestigious unguents and Egyptian liturgical preparations. In: KOSMOS. Jewellery, Adornment and Textiles in the Aegean Bronze Age. Abstracts. Proceedings of the 13th International Aegean Conference; 2010; University of Copenhagen. Liège: Université de Liège; 2010.

Reger, G. The Manufacture and Distribution Of Perfume. In: Archibald, Z., Davies, J., Gabrielsen, V. Making, moving and managing: the new world of ancient economies, 323-31 BC. Oxford: Oxbow Books; 2005

Theophrastus. De odoribus. In: Theophrastus. Enquiry into Plants Vol. II, pp 324389 Harvard University Press; Loeb Classical Library; 1926. http://penelope.uchicago.edu/

Fleur-de-Gigi. Roman Cosmetics. 2013 https://fleurtyherald.wordpress.com/2013/05/27/roman-cosmetics/

Roman perfume bottles (unguentari) on display at Villa Boscoreale by Carla Brain. 2014 http://en.wikipedia.org/wiki/Cosmetics_in_Ancient_Rome#/media/File:Boscoreale,_September_2014_(15).jpg

Grand-Clément, A. Review of Giuseppe Squillace, I giardini di Saffo: profumi e aromi nella Grecia antica. Quality paperbacks, 424. Roma: Carocci editore; 2014. Pp. 118. BMCR 2014.10.34 on the BMCR blog. http://bmcr.brynmawr.edu/2014/2014-10-34.html

Attard, L. Scent Bottles: from Ceremony to Seduction. For Scent Bottles Exhibition 8th November 2011 – 29th January 2012, Palazzo Falson Historic House Museum, Mdina. Malta: FPM; 2011.

http://www.snapadministration.com/snapdatafiles/files/PalazzoFalson/6346 02371059390000.pdf

Schoff, W. The Periplus of the Erythraean Sea: travel and trade in the Indian Ocean. New York: Longmans, Green & Co; 1912. p.112-113.

The Lost Panacea of Silphium. 2009. In: Irrational Geographic Blog. https://irrationalgeographic.wordpress.com/2009/07/08/the-lost-panaceaof-silphium/

Ancient cosmetics and perfumes. 24grammata.com e-magazine. http://www.24grammata.com/?p=6164

Cosentino, F. The use of oil in the Greek Olympics. Journal Of Olympic History. 2000; 8(2):47-48. Dioscoride. De Materia Medica; livre 1

Cuyler, M.J. Rose, sage, cyperus and e-ti: The adornment of olive oil at the Palace of Nestor. In: Nosch, M.L., Laffineur, R. (ed.). KOSMOS. Jewellery, Adornment and Textiles in the Aegean Bronze Age. Proceedings of the 13th International Aegean Conference; 2010; University of Copenhagen. Liège: Peeter Sleuven; 2012. Available from academia.edu

Greenhill, C. Herbs for Health and Beauty in Minoan Crete of 2000BC. http://www.explorecrete.com/archaeology/minoan-herbs.html

Iluz, D., Hoffman, M., Gilboa-Garber, N., Amar, Z.. Medicinal properties of Commiphora gileadensis. African Journal of Pharmacy and Pharmacology. 2010;4(8):516-520

Sarpaki, A. Condiments, Perfume and Dye Plants in Linear B. In: A. Michailidou (ed.). Manufacture and Measurement. Counting, Measuring and Recording Craft Items in Early Aegean Societies. Athens: National Hellenic Research Foundation, Research Center For Greek and Roman Antiquity; 2001 (Meletemata; vol 33). admin@itgreatchoice.com. Greek Natural Beauty - When History teaches and repeats itself 2015 . http://www.itgreatchoice.com/de/en/blog/fysikh-ellhnikhomorfia-otan-h-istoria-didaskei-epanalamvanetai

Athenaeus. The Deipnosophists [Gulick C. trans] In Seven Volumes. London: William Heinemann Ltd, Cambridge, Massachusetts: Harvard University Press; 1951

Walsh, B. (transl.) The Comedies of Aristophanes (in three volumes). London: A.H. Baily &Co. CornHill; 1837 Vol 1., p.256

Aristotle. Nicomachean Ethics. [Ross, W. D. trans] . South Australia: The University of Adelaide Library, eBooks@Adelaide; 2014 [last updated 2014 Dec 17] https://ebooks.adelaide.edu.au/a/aristotle/nicomachean/complete.html Xenophon.

Oikonomikos https://stuff.mit.edu/afs/athena/course/21/21h.401/www/local/xenophon_oikonomikos.html

Pieroni, A., Quave, CL., Villanelli, ML., Mangino, P., Sabbatini, G., Santini, L., et al. Ethnopharmacognostic survey on the natural ingredients used in folk cosmetics, cosmeceuticals and remedies for healing skin diseases in the inland Marches, Central-Eastern Italy. J Ethnopharmacol 2004 http://www.ncbi.nlm.nih.gov/pubmed/15120458

Brun, J.P. The production of perfumes in Antiquity: the cases of Delos and Paestum. American Journal of Archaeology. 2000;104:277