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DYNAMIC REVIEW OF PERFUME FROM ESSENTIAL OIL GERANIOL (PELARGONIUM GRAVEOLENS) AND GINGER (ZINGIBER OFFICINALE)

Dr. Md. Rageeb Md. Usman[1], Mr. Sajan Mangilal Pawara[1]*

[1]Department of Pharmacognosy, Smt. Sharadchandrika Suresh Patil College of Pharmacy, Chopda-425107, Maharashtra, India.

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Abstract:

Perfume is a mixture of fragrant essential oils or aroma compounds (fragrances), fixatives and solvents, usually in liquid form, used to give the human body, animals, food, objects, and living-spaces an agreeable scent.

The Egyptians developed aromatic oils and essences 5000 years ago. Great perfume lovers,

They used almond and rose oil, frankincense and myrrh, cedar, mimosa and lily, nutmeg, sweet balsam, cassia, benzoin and labdanum, galbanum and opopanax in such diverse preparations as aphrodisiacs, medicines, cosmetics and incense. In fact, the art of perfumery in Ancient Egypt was so sophisticated that when archaeologists opened Tutankhamen's tomb in 1922 they discovered an ointment that was still fragrant! The study of fragrance, developed in the Nile Valley, was to inspire other ancient cultures. In Greece, athletes anointed their bodies with aromatic oils, and at banquets Romans refreshed themselves between courses with flower-scented water. It was the Persians who developed the use of exotic ingredients and the technique of extracting oils from flowers through distillation. This expertise was brought to Western Europe at the time of the Crusades.

Keywords: *Perfume, Pelargonium Graveolens, Zingiber officinale*

Corresponding author:

Mr. Sajan Mangilal Pawara,

Basic Health Unit 287/EB Burewala.

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INTRODUCTION:

What Does 'Perfume' Mean?

The word comes from the Latin, meaning 'a sweet smelling fluid containing the essence of flowers and other substances'. But perfume has its origins in ancient Roman ritual. In the temples of Rome, crushed flowers, leaves, wood shavings, spices and aromatic resins were thrown onto burning coals as offerings to the gods. Their scent was released through smoke, 'per fumum' in Latin.

The word perfume derives from the latin ―per fumum‖ meaning through smoke, is fragrant liquid that is sprayed or rubbed on the skin or clothes to give a pleasant smell. Extraction of perfume from various plants resources is of ancient origin. Infact the natives from different tropical regions of the globe have long been extracting oil from numerous oil bearing plants. Human since the ancient time have known how to extract oil from their natural resources. Vegetable oils are naturally occurring esters of higher fatty acids and glycerol. They are widely distributed in nature and were first consumed as food. Later oils were discovered to be used as renewable raw materials for variety of non-food production, for instance perfumes, disinfectants, inks to mention but a few.

Fig.No.-1 Roman perfume bottle; 1st century AD

In the 9th century the Arab chemist Al-Kindi (Alkindus) wrote the Book of the Chemistry of Perfume and Distillations, which contained more than a hundred recipes for fragrant oils, salves, aromatic waters, and substitutes or imitations of costly drugs. The book also described 107 methods and recipes for perfume-making and perfume-making equipment, such as the alembic (which still bears its Arabic name. from Greek ἄμβιξ, "cup", "beaker"described by Synesius in the 4th century

Fig.No.-2 Partially broken perfume amphora; 2nd century AD

The Persian chemist Ibn Sina (also known as Avicenna) introduced the process of extracting oils from flowers by means of distillation, the procedure most commonly used today. He first experimented with the rose. Until his discovery, liquid perfumes consisted of mixtures of oil and crushed herbs or petals, which made a strong blend. Rose water was more delicate, and immediately became popular. Both the raw ingredients and the distillation technology significantly influenced western perfumery and scientific developments, particularly chemistry. There is controversy on whether perfumery was completely lost in Western Europe after the fall of the Western Roman Empire. That said, the art of perfumery in Western Europe was reinvigorated after the Islamic invasion of Spain and Southern Italy in 711 and 827. The Islamic controlled cities of Spain (Al-Andalus) became major producers of perfumes that were traded throughout the Old World. Like in the ancient world, Andalusians used fragrance in devotion to God. Perfumes added a layer of cleanliness that was needed for their devotion. Andalusian women were also offered greater freedoms than women in other Muslim controlled regions and were allowed to leave their homes and socialize outside. This freedom allowed courtship to occur outside of the home. As a result, Andalusian women used perfumes for courtship. Recipes of perfumes from the monks' of Santa Maria Delle Vigne or Santa Maria Novella of Florence, Italy, were recorded from 1221. In the east, the Hungarians produced around 1370 a perfume made of scented oils blended in an alcohol solution – best known as Hungary Water – at the behest of Queen Elizabeth of Hungary.The art of perfumery prospered in Renaissance Italy, and in the 16th century the personal perfumer to Catherine de' Medici (1519–1589), René the Florentine (Renato il fiorentino), took Italian

Fig.No.-3 Egyptian scene depicting the preparation of lily perfume, 4th century BC

refinements to France. His laboratory was connected with her apartments by a secret passageway, so that no formulae could be stolen en route. Thanks to Rene, France quickly became one of the European centers of perfume and cosmetics manufacture. Cultivation of flowers for their perfume essence, which had begun in the 14th century, grew into a major industry in the south of France. Between the 16th and 17th centuries, perfumes were used primarily by the wealthy to mask body odors resulting from infrequent bathing.In 1693, Italian barber Giovanni Paolo Feminis created a perfume water called Aqua Admirabilis, today best known as eau de cologne; his nephew Johann Maria Farina (Giovanni Maria Farina) took over the business in 1732. By the 18th century the Grasse region of France, Sicily, and Calabria (in Italy) were growing aromatic plants to provide the growing perfume industry with raw materials. Even today, Italy and France remain the center of European perfume design and trade.

Fig.No.-4 Ancient Egyptian perfume vase in shape of an amphoriskos; 664–630 BC

The History of Perfumery:
People‘s use of scents, aroma and fragrances has been used for many centuries.Since the beginning of recorded history, humans have attempted to mask or enhance their own odor by using perfume, which emulates nature's pleasant smells. Many natural and man-made materials have been used to make perfume to apply to the skin and clothing, to put in cleaners and cosmetics, or to scent the air. Because of differences in body chemistry, temperature, and body odors, no perfume will smell exactly the same on any two people. Perfume comes from the Latin "per" meaning "through" and "fume," or "smoke." Many ancient perfumes were made by extracting natural oils from plants through pressing and steaming. The oil was then burned to scent the air. Today, most perfume is used to scent bar soaps. Some products are even perfumed with industrial odorants to mask unpleasant smells or to appear "unscented."

While fragrant liquids used for the body are often considered perfume, true perfumes are defined as extracts or essences and contain a percentage of oil distilled in alcohol. (Clark E. et al, 1975). A perfume

is composed of three notes. The base note is what a fragrance will smell like after it has dried. The smell that develops after the perfume has mixed with unique body chemistry is referred to as the middle note. And the top note is the first smell experienced in an aroma. Each perfumery has a preferred perfume manufacturing process, but there are some basic steps. The notes unfold over time, with the immediate impression of the top note leading to the deeper middle notes, and the base notes gradually appearing as the final stage. These notes are created carefully with knowledge of the evaporation process of the perfume. The top note consists of small light molecules that evaporate quickly. The middle note forms the heart of main body of a perfume and act to mask the often unpleasant initial impression of base notes.

Traditionally perfumes were made from plant and animal substances and prepared in the form of waters, oils, unguents, powders, and incense. This last method of fragrance gives us our word perfume‘which means _to smoke through‘. Most modern perfumes are alcohol-based and contain synthetic scents. While the term _perfume‘usually refers to fragrances in general, in the more technical language of the perfumer, a perfume must contain over 15% of fragrance oils in alcohol.

Perfume Notes:
Perfume is described in a musical metaphor as having three sets of notes, making the harmonious scent accord. The notes unfold over time, with the immediate impression of the top note leading to the keeper middle notes, and the base notes gradually appearing as the final stage. These notes are created carefully with knowledge of the evaporation process of the perfume.

Fig.No.-5 Perfume Notes

Sources of Perfumes:
Aromatics sources:
Plant sources:
Plants have long been used in perfumery as a source of essential oils and aroma compounds. These aromatics are usually secondary metabolites produced by plants as protection against herbivores, infections, as well as to attract pollinators. Plants are by far the largest source of fragrant compounds used in perfumery. The sources of these compounds may be derived from various parts of a plant. A plant can offer more than one source of aromatics, for instance the aerial portions and seeds of coriander have remarkably different odors from each other. Orange leaves, blossoms, and fruit zest are the respective sources of petitgrain neroli, and orange oils.

Bark: Commonly used barks include cinnamon and cascarilla. The fragrant oil in sassafras root bark is also used either directly or purified for its main constituent, safrole, which is used in the synthesis of other fragrant compounds.

Flowers and blossoms: Undoubtedly the largest and most common source of perfume aromatics. Includes the flowers of several species of rose and jasmine, as well as osmanthus, plumeria, miosa, tuberose, narcissus, scented geranium, cassie, ambrette as well as the blossoms of citrus and ylang-ylang trees. Which flower is used for perfume? Image result for flowers and blossoms perfumeWidely acknowledged as the most fragrant flower,.Although not traditionally thought of as a flower, the unopened flower buds of the clove are also commonly used. Most orchid flowers are most commercially used to produce essential oils or absolutes, except in the case of Vanilla, an orchid, which must be pollinated first and made into seed pods before use

Fruits: Fresh fruits such as apples, strawberries, cherries unfortunately do not yield the expected odors when extracted; if such fragrance notes are found in a perfume, they are synthetic. Notable exceptions include litsea cubeba, vanilla, and juniper berry. The most commonly used fruits yield their aromatics from the rind; they include citrus such as oranges, lemons, and limes. Although grapefruit rind is still used for aromatics, more and more commercially used grapefruit aromatics are artificially synthesized since the natural aromatic contains Sulfur and its degradation product is quite unpleasant in smell.

Leaves and twigs: Commonly used for perfumery are lavender leaf, patchouli, sage, violets rosemary, and citrus leaves. Sometimes leaves are valued for the "green" smell they bring to perfumes, examples of this include hay and tomato leaf.

Resins: Valued since antiquity, resins have been widely used in incense and perfumery. Highly fragrant and antiseptic resins and resin-containing perfumes have been used by many cultures as medicines for a large variety of ailments. Commonly used resins in perfumery include labdanum, frankincense, myrrh, Perusbalsam, gum benzoin. Pine and fir resins are a particularly valued source of terpenes used in the organic synthesis of many other synthetic or naturally occurring aromatic compounds. Some of what is called amber and copal in perfumery today is the resinous secretion of fossil conifers.

Resinous sources:
Benzoin
Source: Obtained from Styrax Benzoin, Dryand and other species known as Sumatra Benzoin or from Styrax Tonkinesis known as Siam Benzoin family Styraceae. While benzoin resin is used as a common ingredient in incense-making and perfumery, it is also used clinically as a mild antiseptic agent in over-the-counter .

Chemical constituents: Sumatra benzoin contains free balsamic acid (benzoic acid and cinnamic acid) and the major constituent from Siam benzoin is an ester coniferyl benzoate (about 76%)

Uses: It is used to fix the odor of incenses, soaps, perfumes and several other cosmetics.In perfumery,

Fig.No.-6 Benzoin

a) Balsam of peru
Source: Obtained from the trunk of trees *Myroxylon balsamum* var family *Leguminosae*

Chemical constituents: 50-65% high boiling volatile oil with cinnamic and 25-28% of resin, traces of styrene, vanillin and coumarin
Uses: used as a flavoring agent and also for masking

Fig.No.- 7 Balsam of peru

b) Myrrh
Source: It is an oleo-gum resin obtained from Commiphora molmol engler and from Commiphora species family Burseraceae
Chemical constituents: It contains about 10% of yellowish thick volatile oil and 60% gum, 85-90% resin and bitter principle about 3-4%
Uses: Myrrh is an astringent to the mucous membrane and hence it is tintures is used in mouth washes and gargles]

Fig.No. - 8 Myrrh

Roots, rhizomes and bulbs: Commonly used terrestrial portions in perfumers include iris rhizomes, Vetiver roots, various rhizomes of the ginger family.

Seeds: Commonly used seeds include Tonka bean, carrot seed, coriander, caraway, cocoa, nutmeg, mace, cardamom, and anise.

Woods: Highly important in providing the base notes to a perfume, wood oils and distillates are indispensable in perfumery. Commonly used woods include sandalwood, rosewood, Agarwood, birch, cedar, juniper, and pine. These are used in the form of macerations orry-distilled (rectified) forms.

Animal sources

a) **Ambergris:** Lumps of oxidized fatty compounds, whose precursors were secreted and excelled by the sperm whale. Ambergris should not be confused with yellow amber, which is used in jewelry. Because the harvesting of ambergris involves no harm to its animal source, it remains one of the few animalic fragrance agents around which little controversy now exists. **Source:** Is the least used, but probably best known of the animal fixative. It is a secretion developed by a sperm whale.

It is the pathological product formed in the intestinal tract of sperm whale *Physeter cotodon linn* family *Physeteridae*

Chemical constituents: It is composed of 80-85% ambrein, 12-15% ambergris oil which is the active ingredient

Uses: used for fixing delicate flavours

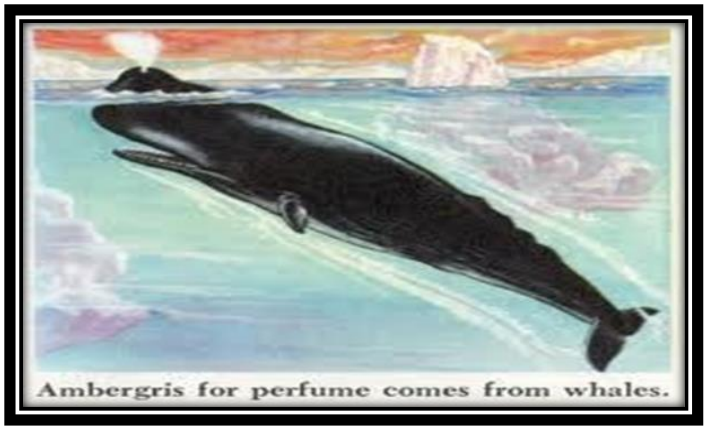

Fig.No.-9 Ambergris

b) **Civet:** Also called Civet Musk, this is obtained from the odorous sacs of the civets, animals in the family Viverridaemongoose. The World Society for the Protection of Animals investigated African civets caught for this purpose.

Source: It is the odorous secretion of the scent gland in the region of external generative organs of male and female civet cat *Viverra Zibetha Linn* family *Viverridae*

Chemical constituents: mainly contains civetone, civetal, indole, ethylamine, propylamine and few unidentified free acids

Uses: flavoring aents in cosmetics and as fixative in perfumery

Fig.No.-10 Civet

c) **Deer musk:** Originally derived from the musk sacs from the Asian musk deer, it has now been replaced by the use of synthetic musk sometimes known as "white musk".

Source: Dried secretion of the preputial glands of male musk deer **Moschus Moschiferus** *Linn* family *Cervidae* found in Himalayas The odor is due to the cyclic ketone called “muskone”.

Chemical constituents: musk yeild about 1.5 % w/w of dark brown volatile oil

It also contains fats, wax, cholesterin, albuminoids and resins

It contains a cyclic ketone (15C) called Musketone which is the main constituent

Uses: The most useful of the animal fixative, imparts body and smoothness to a perfume composition.

Fig.No.-11 Deer musk

d) **Castoreum:** Obtained from the odorous sacs of the North American beaver.

e) **Hyraceum:** Commonly known as "Africa Stone", is the petrified excrement of the Rock Hyrax.

f) **Honeycomb:** From the honeycomb of the honeybee. Both beeswax and honey can be solvent extracted to produce an absolute. Beeswax is extracted with ethanol and the ethanol evaporated to produce beeswax absolute.

Other natural sources:

a) **Lichens:** Commonly used lichens include oakmoss and treemoss thalli.

b) **Seaweed:** Distillates are sometimes used as essential oil in perfumes. An example of commonly used seaweed is Fucus vesiculosus, which is commonly referred to as bladder wrack. Natural seaweed fragrances are rarely used due to their higher cost and lower potency than synthetics.

Synthetic sources:

Certain high boiling, comparatively odorless esters are used asfixatives to replace some imported animal fixative. Among them are:

- Glyceryl diacetate
- Ethyl phthalate
- Benzyl benzoate
- Amyl benzoate
- Cinnamic alcohol esters
- Cinnamic acid esters
- Musk ketone
- Musk ambrette
- Vanillin
- Courmarin
- Indole
- Skatole

a) Diethyl phthalate:

- It is known as palanone or ethyl phthalate
- It is colorless, odorless, oily liquid
- It has bitter and disagreeable taste
- Density- 1.232 at 14 C
- Boiling point- 295 C
- It is insoluble in water, miscible with alcohol, ether and many other organosolvent

b) Benzyl benzoate:

- It is benzoic acid phenyl methyl ester
- It is constituted in peru balsam and tolu balsam
- It is prepared by action of sodium benzoate and benzaldehyde by the triesterification of sodium benzoate and bezyl chloride in presence of triethyl amine
- It is an oily liquid
- It has faint, pleasurable aromatic odour
- Density- 1.118 at 25C
- It is sparingly volatile with steam
- It is insoluble in water, miscible with alcohol, ether, chloroform and oils

c) Alcohol:

- Manufacture by fermentation of starch, sugar and other carbohydrates from ethylene acetylene liquors
- It is clear colorless, very mobile, flamable liquid, pleasant odor, burning taste, absorb water rapidly from air, miscible with water and many organic liquid

Essential Oils:

Essential oils are natural fragrances extracted from virtually every parts of a plant. Essential oils are volatile and liquid aroma compounds from natural sources usually plants, they are not oils in a strict sense, but often share with oils poor solubility on water. It contains mainly volatiles as terpenoids, benzenoids, fatty acid derivatives and alcohols. The Federal Drug Agency (FDA) and other authorities recognize essential oils generally as safe. Although essential oils are widely used on cosmetics the uses of essential oils are determined by their chemical, physical and sensory properties, which differ greatly from oil to oil. Each of the individual chemical compounds that can be found on oil contributes to the overall character. An essential oil is a concentrated hydrophobic liquid containing volatile (easily evaporated at normal temperatures) chemical compounds from plants. Essential oils are also known as volatile oils, ethereal oils, aetheroleum, or simply as the oil of the plant from which they were extracted, such as oil of clove. An essential oil is "essential" in the sense that it contains the "essence of" the plant's fragrance—the characteristic fragrance of the plant from which it is derived. The term "essential" used here does not mean indispensable or usable by the human body, as with the terms essential amino acid or essential fatty acid, which are so called because they are nutritionally required by a living organism.

Sources of Essential Oil:

Essential oils are desired from various types and parts of plant Some of them include:

1) Lemongrass

Biological Sorce- Lemongrass oil is obtained form *Cymbopogon flexuosus Stapf. (syn. Andropogonnardus var. flexuosus Hack.),* belonging to family *Poaceae*.

Fig.No.- 12 *Cymbopogon flexuosus*

Uses

- Lemongrass is used in herbal teas and other nonalcoholic beverages in baked goods, and in confections.
- Oil from lemongrass is widely used as a fragrance in perfumes and cosmetics, such as soaps and creams.
- Citral, extracted from the oil, is used in flavoring soft drinks in scenting soaps and detergents, as a fragrance in perfumes and cosmetics, and as a mask for disagreeable odors in several industrial products.
- Citral is also used in the synthesis of ionones used in perfumes and cosmetics.

Jasmine:

Biological Source- Common jasmine, or poet's jasmine *(Jasminum officinale)*, Family- *Oleaceae*

Fig.No. - 13 *Jasminum officinale*

Uses

- Jasmine is used to add fragrance to creams, lotions, and perfumes
- The flower is used to make medicine.
- Jasmine has been used for liver disease (hepatitis), liver pain due to cirrhosis, and abdominal pain due to severe diarrhea (dysentery).
- It is also used to cause relaxation (as a sedative), to heighten sexual desire (as an aphrodisiac), and in cancer treatment.

Coumarin:

Biological Source- *Dipteryx Odorata Wild & Dipteryx Oppositifollia* Belonging to Family- *Leguminosae.*

Fig.No.- 14 *Dipteryx Odorata Wild*

Uses

- Coumarin is used in certain perfumes and fabric conditioners.
- Coumarin has been used as an aroma enhancer in pipe tobaccos and certain alcoholic drinks

Violet:

Biological Source- Violet is a genus of flowering plants in the violet family *Violaceae*.

Fig.No. - 15 *Hottonia palustris*

Uses

- Viola odorata is used as a source for scents in the perfume industry. Violet is known to have a 'flirty' scent as its fragrance comes and goes. Ionone is present in the flowers, which turns off the ability for humans to smell the fragrant compound for moments at a time.

Eugenol:
Biological source - *Eugenia carryophyllus*
Belonging to family-*Myrtaceae.*
Uses

- It is used in carnation type of perfume as it has odour strongly.
- Large quantity of eugenol are used in soaps & detergents.
- Eugenol is also used in food industry as a spicy & flavouring agent.
- Large quantity of eugenol are used in commercial production ofbvanillin.
- Oil of cloves or eugenol is commonly used by dentists because it is antiseptic and anti-inflammatory. They often apply it to the gums to kill germs and relieve the pain of dental surgery such as tooth extractions, fillings, and root canals.

Raspberry:
Biological Source: It is a fresh fruit obtained from *Rubus Stringosus* belonging to family *Rosaceace.*

Fig.No. - 16 *Rubus Stringosus*

Uses

- Raspberry juice is used in preparation of raspberry syrup which is the flavored

vehicle used to disgust the salty taste of drugs and medicinal preparations

- It is used in industry for flavoring of food materials
- In cosmetics, it is used as flavoring agent in lipsticks and many preparation

Treatment / Purification of Essential Oils

Essential oil as obtained from the oil separator is in crude form. It may have suspended impurities and appreciable moisture content. It might even contain some objectionable constituents which degrade its flavor/fragrance quality. The presence of moisture and impurities adversely affects the keeping quality of oil and accelerates the polymerization and other undesirable reactions. Remedies Filtration of oil through Marking is a simple method for removal of impurities. For removal of the moisture and free the oil of suspended impurities, addition of a drying agent like Anhydrous Sodium Sulphate to the oil, standing the oil overnight will get the oil clear of moisture. On industrial scale use of high speed centrifuge to clarify the essential oils can be also used. Essential oils can also be rectified or re-distilled to remove objectionable constituents, dark colour or polymerized oil.

ACTIVE PROFILE:

The Following Essential oil Use in Development of perfume:

1) Geraniol:

Biological source-*Pelargonium Graveolens/Pelargonium Asperum* belonging to family-*Geranaceae.*

Geraniol is a monoterpenoid and an alcohol. it is the primary component of rose oil, Palmorosa oil, citronella oil. It is colorless to slightly yellowish colour oil, it has less solubility in water but it's soluble in common organic solvents. Pure geraniol is a very pleasant smelling liquid Geraniol is the formed more than 160 essential oil especially in ginger grass, java citronella, tuberose, musk , nutmeg, rose, jasmin lavender,carrot, eucalptus etc. The palmrosa oil contain the highest level of geraniol, approximately about 80 to 95%. Citronella oil contain in the range of 15 to 20%.

Geraniol is also produced by the scent glands (nasanov gland) of honey bees.

Fig. No – 17 Scent glands (nasanov gland) of honey bees.

Properties:

It is colourless to slightly yellowish colour oil, it has less solubility in water but it's soluble in common organic solvents Pure geraniol is a very plesant smelling liquid, Geraniol is a highly reactive

Fig. No - 18 Geraniol

Uses:

- It is commonly use in perfumes.
- It is use in flavours such as raspberry, grapes, apple, lime, orange
- lemon, watermelon.
- It has been considered as mosquito and insect repellants.
- Geraniol has been suggested to new class of chemo prevention
- agent (anti-cancer).

Ginger:

Biological source- ***(Zingiber officinale*)** is a flowering plant whose rhizome, family ***Zingiberaceae*** ginger root or ginger, is widely used as a spice and a folk medicine.It is a herbaceous perennial which grows annual pseudostems (false stems made of the rolled bases of leaves) about one meter tall bearing narrow leaf blades. The inflorescences bear flowers having pale yellow petals with purple edges, and arise directly from the rhizome on separate shoots. Ginger is in the family *Zingiberaceae*, which also includes turmeric (Curcuma longa), cardamom (Elettaria cardamomum), and galangal. Ginger originated in Maritime Southeast Asia and was likely domesticated first by the Austronesian peoples. It was transported with them throughout the Indo-Pacific during the Austronesian expansion (c. 5,000 BP), reaching as far as Hawaii. Ginger is one of the first spices to have been exported from Asia, arriving in Europe with the spice trade, and was used by ancient Greeks and Romans.The distantly related dicots in the genus Asarum are commonly called wild ginger because of their similar taste.

Uses:

Ginger is a common spice used worldwide, whether for meals or as a folk medicine.Ginger can be used for a variety of food items such as vegetables, candy, soda, pickles, and alcoholic beverages

Ginger is a fragrant kitchen spice.Young ginger rhizomes are juicy and fleshy with a mild taste. They are often pickled in vinegar or sherry as a snack or cooked as an ingredient in many dishes. They can be steeped in boiling water to make ginger herb tea, to which honey may be added. Ginger can be made into candy or ginger wine.

Fig. No -19 Ginger

CONCLUSION:

Geraniol one of the main benefits of wearing perfume is enhancing the mood. Perfume helps lift your spirits. You can also wear a perfume that reflects your mood, to project it better. Whether you feel playful, mischievous, timid or even reserved, perfumes offer many different kinds of smells for different moods. Select and wear a perfume as per the occasion so that you can get in the apt mood for it or Ginger essential oil is used in perfumery to add spice and depth to Oriental or spice blends. It's also valuable for incense or gourmand fragrances and a tiny bit will add interest to florals.

REFERENCES:

1. Balasubramanian, Narayanaganesh (20 November 2015). "Scented Oils and Perfumes". American Chemical Society. ACS Symposium Series. 1211: 219–244. doi:10.1021/bk-2015-1211.ch008. ISBN 9780841231122.
2. "Perfume – Definition and More from Dictionary". Merriam-Webster.
3. Shyndriayeva, Galina (2015). "Perfume at the Forefront of Macrocyclic Compound Research: From Switzerland to Du Pont" (PDF). International Workshop on the History of Chemistry. Tokyo.
4. perfume". Online Etymology Dictionary. Retrieved 11 October 2020.
5. Strathern, Paul (2000). Mendeleyev's Dream – The Quest For the Elements. New York: Berkley Books. ISBN 0-425-18467-6.
6. Levey, Martin (1973). Early Arabic Pharmacology: An Introduction Based on Ancient and Medieval Sources. Brill Archive. p. 9. ISBN 90-04-03796-9.
7. A.K. Sharma; Seema Wahad; Raśmī Śrīvāstava (2010). Agriculture Diversification: Problems and Perspectives. I. K. International Pvt Ltd. p. 140.
8. Jump up to:a b Roach, John (29 March 2007). "Oldest Perfumes Found on "Aphrodite's Island"". Archived from the original on 12 October 2013. Retrieved 21 June 2014.
9. Ancient Perfumes Recreated, Put on Display in Rome". Fox News.
10. Elis, Kiss (2 June 2018). "Ancient perfume recreated for anniversary show". Kathimerini English Edition. Retrieved 6 June 2018.
11. al-Hassani, Woodcok and Saoud (2006) 1001 Inventions; Muslim Heritage in Our World, FSTC, p.22.
12. M. Ullmann (1986), "AL-KĪMIYĀ", The Encyclopaedia of Islam, vol. 5 (2nd ed.), Brill, p. 111b
13. E. Wiedemann; M. Plessner (1986), "AL-ANBĪḲ", The Encyclopaedia of Islam, vol. 1 (2nd ed.), Brill, p. 486a
14. Henry George Liddell; Robert Scott, eds. (1897), "ἄμβιξ", Greek-English Lexicon (8th ed.), Harper & Brothers, p. 73
15. Marcellin Berthelot (1889), Introduction à l'étude de la chimie des anciens et du moyen âge, Steinheil, p. 164
16. History of Perfumes in Spain". La Casa Mundo.
17. Giovanni Dugo, Ivana Bonaccorsi (2013). Citrus bergamia: Bergamot and its Derivatives. CRC Press. p. 467. ISBN 9781439862292.
18. Thompson, C.J.S. (1927). The Mystery and Lure of Perfume. London: John Lane the Bodley Head Limited. p. 140.
19. Voudouri, Dimitra; Tesseromatis, Christine (December 2015). "Perfumery from Myth to Antiquity" (PDF). International Journal of Medicine and Pharmacy. 3 (2): 52. doi:10.15640/ijmp.v3n2a4.
20. Sullivan, Catherine (1 March 1994). "Searching for nineteenth-century Florida water bottles". Historical Archaeology. 28 (1): 78–98. doi:10.1007/BF03374182. ISSN 0440-9213. S2CID 162639733.
21. Stoddart, David Michael (1990). The Scented Ape: The Biology and Culture of Human Odour. Cambridge University Press. pp. 142–167.
22. Compare: Pepe, Tracy (2000). So, What's the entire Sniff About? An In-Depth Plea for Sanity and Equal Rights for Your Sense of Smell, Our Most Neglected and Endangered Sense. So Whats all the Sniff about. p. 46. ISBN 9780968707609. Retrieved 11 July 2015. In 1693
23. A Brief History of Men's Cologne – Discover the History of Men's Fragrances-COLOGNE BLOG". COLOGNE BLOG. Archived from the original on 3 February 2014.
24. Charles Rice, Frederick Albert Castle (1879). New Remedies: An Illustrated Monthly Trade Journal of Materia Medica, Pharmacy and Therapeutics. W. Wood & Company. p. 358.