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Extraction and Formulation of Perfume from Plant

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Abstract: *Perfume has been involved in human life since ancient times. Nowadays, different acids are created according to people's thoughts. Perfume products usually contain all herbal ingredients, but sometimes they usually contain three main ingredients: beeswax, carrier oil, and essential oil. Apply the cream to the pulse points using your fingers or a cotton swab. Various tests are performed to identify ingredients and measure their quality. These evaluation methods are auditory, physical and chemical. The herbal medicinal preparation has the advantages of easy use, patient comfort, easy preparation, low addiction and high efficiency in small quantities. The disadvantages are the small size of the mixture, which can reduce the homogeneity of the mixture, affecting patients, poor absorption and other factors. Nowadays, perfume has become an important part of people's daily lives. Recent studies show that alcohol and a handful of perfumes used as solvents have been shown to be toxic to human health, especially respiratory, allergy, autism, asthma, asthma, skin and eczema symptoms*

Keywords: Beeswax, Almond oil, Jojoba oil, Grapeseed oil, olive oil, Sundalwaad, Vanilla

I. INTRODUCTION

The word perfume comes from the Latin word perfumum, which means smoking. Over time, countless perfumes and fragrances have entered daily life, food, beverages and food products, personal care products (soaps, toothpastes, mouthwashes, deodorants, shower gels and shampoos), perfumes and other cosmetic and pharmaceutical formulations. Adding fragrance can make such products more appealing or mask the taste or odor of bad products

Perfume is a creative method of mixing scents into alcoholic beverages. Odors are volatile compounds that are constantly released into the air. Fragrance ingredients, whether derived from natural sources or made with synthetic chemicals, can cause health or environmental concerns when used due to the presence of volatile organic compounds (VOCs). 1. Ethanol is still the most widely used solvent in the production of perfume and cologne today. Ethanol is used by perfumers because it can dissolve most of the ingredients used in perfumes

One option for alcohol solutions is oil-based perfume. Almost all kinds of medium oils with lowest odor can be mixed during the production process. Oil-based fragrances can mask or block the scent of perfumes .The word perfume is derived from the Latin word "perfume" meaning "from smoke". Evidence of its existence dates back 4,000 years to the practice of burning incense in Mesopotamia. The science of perfume is chemistry and the result of scent is creativity. The classification of perfume is made according to its concentration level, the scent family it belongs to and the notes the scent contains (Barwich,2016). Concentration level refers to the intensity and time it takes to be present on the skin. The higher the concentration of the scent, the longer the scent lasts and the longer It stays on the skin.

Alcohol-based perfumes are the most common fragrances on the market. However, due to ethanol's ability to cause irritation[4], its flammability, and restrictions on its use in the Middle East have not b

een justified. There is a growing market for alcohol-free perfumes, usually in solid or liquid form. Format. In the form of oil. Data on this product has many disadvantages discussed above. For this reason, new solutions are still being sought regarding the physical and chemical properties of spices. To expand the market to new customers such as children, teenagers and allergy sufferers, eliminating the most common solvent, ethanol, has become necessary, but this remains very difficult.

- Perfume- 15% mousse ray 30% aromatics
- Eau de Perfume- 8% rah 15% aromatics
- Eau de Toilette- 4% rah 8% aromatics

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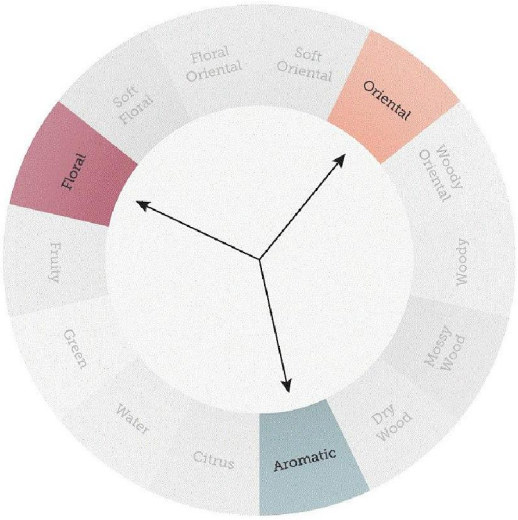


< br>Cologne – 2% musrau 5% aromatic compounds (Fratini
Et al., 2016; Tortora and Derrickson, 2020)

Formulation and evaluation of solid perfume containing essential oil.

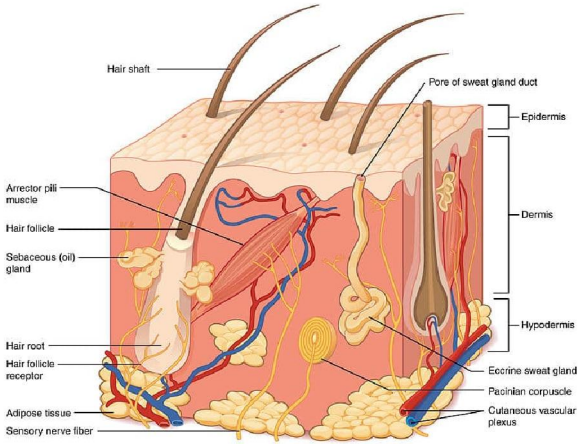
How to use

Rub the top with a clean finger or cotton swab to apply the scent to your wrists and other pulse points. Repeat as necessary.

Skin

Skin is the heaviest organ of the body and covers the entire outer surface of the body. Its size is approximately 2 square meters. The skin consists of two layers: epidermis and dermis V1". Water-soluble compounds cannot be absorbed through the skin, while fat-soluble compounds can. Carbon dioxide and oxygen are examples of such cases." Fat-soluble topical steroids can reach the dermal papilla area. Transdermal drugs are administered by absorption through the skin.

Anatomy and Physiology of the Skin



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Epidermis. - The epidermis is a stratified, squamous epithelium layer That is composed primarily of two types of cells: keratinocytes And dendritic cells. The keratinocytes differ from the "clear" Dendritic cells by possessing intercellular bridges and ample Amounts of stainable cytoplasm.

Keratinocytes - At least 80% of cells in the epidermis are the ectodermally Derived keratinocytes. The differentiation process that occurs As the cells migrate from the basal layer to the surface of the Skin results in keratinization, a process in which the kerati-Nocyte first passes through a synthetic and then a degradative Phase.

Basal Layer- The basal layer, also known as the stratum germinativum, Contains column-shaped keratinocytes that attach to the base-Ment membrane zone with their long axis perpendicular to The dermis. These basal cells form a single layer and adhere To one another as well as to more superficial squamous cells Through desmosomes junctions

Squamous Cell Layer- Overlying the basal cell layer is a layer of the epidermis That is 5–10 cells thick and known as the squamous cell layer Or stratum spinosum.

Granular Layer- The most superficial layer of the epidermis containing Living cells, the granular layer or stratum granulosum, is Composed of flattened cells holding abundant Katharine Granules in their cytoplasm. These cells are responsible for Further synthesis and modification of proteins involved in Keratinization.

Cornified Layer- Horny cells (corneocytes) of the cornified layer provide Mechanical protection to the underlying epidermis and a bar-Rier to prevent water loss and invasion by foreign substances.

Apocrine Sweat Glands - Whereas eccrine glands are primarily involved in thermal Regulation, apocrine glands are involved in scent release Apocrine sweat glands in humans are confined Mainly to the regions of the axillae and perineum, and unlike Eccrine and apoeccrine glands, they do not open directly to the skin surface. Instead, the intraepithelial duct opens into Pilosebaceous follicles, entering in the infundibulum above the Sebaceous duct. The basal secretory coil of apocrine glands, Which is normally located entirely in subcutaneous fat, differs From that of eccrine glands in that it is composed exclusively Of secretory cells; no ductal cells are present.

Apoeccrine Sweat Glands- The apoeccrine sweat gland (AEG) develops during Puberty from eccrine-like precursors, opening directly unto The skin. Discovered during the isolation of human axillary Sweat from patients with axillary hyperhidrosis, a condition Characterized by abnormally increased rates of perspiration, The AEG is found in the adult axillae; its relative frequency Varies from person to person. Like eccrine glands, the AEG Opens directly to the skin surface.

Hair Follicles – Hair has many valuable biologic functions including Protection from the elements and distribution of sweat-gland Products. In addition, it has an Important psychosocial role In society. Hair follicles vary considerably in size and shape, Depending on their location, but they all have the same basic Structure. The number and distribution of hair follicles over The body and the future phenotype of each hair is established During fetal development; no extra follicles are added after Birth.

Sebaceous Glands - Sebaceous glands are found in greatest number on the Face and scalp but are present on nearly all other locations Of the body with the exception of the tarsal plate of the eye-Lids, the buccal mucosa and vermilion borders of the lip, the Prepuce and mucosa lateral to the penile frenulum, the labia Minora, and the female areola .

Dermis - The dermis is an integrated system of fibrous, filamentous, and amorphous connective tissue that accommodates Stimulus-induced entry by nerve and vascular networks, Epidermal derived appendages, fibroblasts, macrophages, And mast cells. Other blood-borne cells, including lympho Cytes, plasma cells, and other leukocytes, enter the dermis In response to various stimuli as well. The dermis comprises The bulk of the skin and provides its pliability, elasticity, and tensilstrength.

Perfumes are required

- It promotes cleanliness and personal care.
- Smelling good conveys the idea of personal care while also representing good vibes.
- Wearing specific scents while performing various tasks may aid in recalling specific events and activities.
- A fragrance also contributes to mood intensification.
- Smelling good boosts confidence.
- Many aromatic essential oils are employed in aromatherapy and naturopathic therapies.

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- Perfumes may also be used to entice or repel people.
- Overall, it not only improves health but also relieves stress and promotes a happy lifestyle

II. BENEFITS OF SOLID PERFUMES

Travelling

Traveling Everyone is aware of how challenging it can be to pack all products that are under100mL in a carry-on. When the perfume is in solid form, leaving it at home can be one less thing to worry about.

Absent alcohol

Alcohol is a common ingredient in liquid perfumes, which helps them evaporate when sprayed. Since a solid perfume doesn't require assistance drying, it usually doesn't have alcohol or other irritants.

Compact and Practical

Asmallcontainerorlipbalmtubeisthemostconvenientcontainertocarryasolidperfumein.Theyareportable and can be used as a quick energy boost throughout the day.

No Leaking:

Asolidperfumewon'tleakandmakeamessifyou'retravelingwithitorevenjustkeepingitstashed in a cabinet at home!

Aroma therapy

If you enjoy aroma therapy and blending various soils, you can turn it in to a portable solid scent . A headache? Get out your lavender-scented lip balm! To make it simpler than using oils intheirliquid form , you can evenpre-mixa variety of balms for various ailmentsX111

Being considerate of others:

Does anyone else dislike it when they decide to freshen up in public and give off a huge, choking waft of perfume perfume only lingers on your skin

III. PLAN OF WORK

Research and concept development
↓
Formulation design
↓
Production
↓
Develop the solid perfume using selected ingredients
↓
Laboratory testing
↓
Optimization and Adjustment
↓
Packaging
↓
Quality control
↓
Report writing

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IV. RESEARCH AND CONCEPT DEVELOPMENT

Do a literature survey, and read articles related to solid perfumes, their merits, and their demerits.

Formulation design:

- Select the base ingredients, including essential oil, and beeswax.
- Consider the desired properties, such as its chemical constituents.
- Determine the color range and develop pigment blends.

Production:

• Identify local suppliers for the ingredients and packaging materials.
• Purchase ingredients and packaging materials in small quantities.
• Develop the formulation of the solid perfume using selected ingredients
• Develop a formulation by combining the selected ingredients Laboratory testing:
• Create small-scale batches of solid perfumes formulations based on the initial design.
• Perform compatibility tests and stability studies on the ingredients.
• Evaluate the texture, color, scent, and overall performance of each formulation.

Optimization and Adjustments:

• Analyze the results of the initial testing and make necessary adjustments.
• Modify the formulation to improve properties like spread ability, and adherence.
• Conduct additional testing, such as microbial and safety assessments.

Methodology

Instruments:

1. Porcelain dish
2. Stirrer
3. Tong
4. FCBeaker
5. Burner
6. Tripod stand
7. Water bath
8. Containertofillfinishproduct

Solid Perfume Ingredients

Sr. No.	Ingredients	Quantity	Use
1	Beeswax	10 gm	To from a liquid state to solid state. Longer duration of fragrance.
2	Almond oil	1 ml	Nourishing Moisturizing
3	Levender oil	10 drops	Hydration Moisturizer Smoothing effect
4	Sandalwood essential oil	10 drops	Numerous signaling pathway. Progressing multiple illness
5	Olive oil	15 drops	Improve shelf-life. Moisturizer Smoothing effect

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V. FORMULATION OF PERFUMES

Fragrance oils contain hundreds to hundreds of ingredients, often organized into scents based on the specific role they play.

These components can be divided into four groups

- Main Fragrance (Heart Fragrance): - May contain one or more main ingredients. Use it for a specific concept like “rose”. Alternatively, many Can be used together to create an “abstract” scent distinct from natural ingredients. For example, jasmine and roses are often mixed to create a sweet scent.
- Modifiers: These ingredients change the main aroma and give the perfume some desired properties; for example, fruit esters can be included in floral notes and cherry cola scent can be considered variables.
- Blends: A large group of ingredients that vary between different “layers” or bases of the perfume. These can be used on their own as key ingredients in key fragrances. Ingredients include linalool and hydroxycitronellal.
- Fixatives: They are used to improve the smell by improving it. Many resins, wood waxes and roots are used for treatment. The top, middle and base notes of a perfume may have separate main scents and other components. The perfume’s essential oil is then mixed with ethanol and water, matured in tanks for several weeks, and filtered through a mechanical device that acts as a chemical product, smelling the mixture and extracting the components. Remove debris and debris before filling perfume bottles.

Pre formulation Study

Coca butter -

Cocoa butter can be obtained from by-product of chocolate powder processing from the result of mechanical pressing using hydraulic press. As a source of vitamin E, cocoa butter in cosmetic has some advantages which are to soften and moisturize the skin. Meanwhile, jasmine can be used as a fragrance in perfume and cosmetics. In this study, cocoa butter was used as raw material for solid perfume. Its optimal concentration in the product was determined. Solid perfume was made by melting cocoa butter and beeswax at 90°C followed by adding jasmine oil as fragrance.

Almond oil – Seeds of Prunus dulcis, Rosaceae, give oil, as which is golden yellow, odorless, chemically contains 40-55% fixed oils, 20% proteins, mucilage, emulsion, 2.5-4% amygdalins. These oils are also referred to as nourishing or moisturizing oils, Also working as a vehicle for this formulation. Many carrier oils like grape seed oil, almond oil, jojoba oil, avocado oil, And coconut oil can also be used.

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Vanilla essential oil – from vanilla pods, Vanilla fragrans, V. plantifolia, belonging to Family Orchidaceae, is chemically composed of vanillin, anisyl Alcohol, p-hydroxybenzoic acid, piperonal, vitispirane

Sandalwood essential oil- Sandalwood, genus Santalum, family Santalaceae, especially the fragrant wood of the true, or white, sandalwood, Santalum album". One of the most precious essential oils is sandalwood essential oil. It is widely used in Fragrance, cosmetics, and aromatherapy. The use of naturally occurring chemicals has been advocated not only Because of their benign properties, but also because of their capacity to control numerous signalling pathways Involved in the progression of multiple illnesses. The adoption of a novel 'green approach for extracting essential Oil with the least amount of energy, solvents, and time must be explored. The microwave Hydrodistillation process is one that has been successfully developed".

Method

1. Take 10 grams of beeswax and 1 ml of almond oil and put them in a 100 ml beaker.
2. Replace the beeswax with sweet almond oil. Heat the mixture over a bath, here we use the bath.
3. The temperature should be below 100 oC.
4. When the mixture becomes liquid, remove it from the stove.
5. Mix essential oils one by one
6. Add 15 drops of Olive oil essential oil, 10 drops of Levender essential oil and 10 drops of sandalwood essential oil to another 50ml Ml beaker are mixed simultaneously.
7. Pour the liquid into the last container. Place the lid on the top of the box. This will help prevent condensation in the container while reducing the risk of microbial contamination of the product.
8. Cool before use.
9. Place your fingers on the product to liquefy it, then rub your fingers where you want the scent to hit.

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Evaluation tests

Determination of Homogeneity

The formulations were tested for homogeneity by touch and visual appearance. Means that the ingredients of a semi-solid compound need to be evenly distributed throughout the product.

Organoleptic test

The organoleptic test was a method of testing that made use of the five human senses. Color, aroma, appearance, moisture, comfort, and homogeneity are all factors to consider. Evaluation means the study of drugs using the organs of the senses. It refers to the methods of analysis like color, odor, taste, size, shape, and special features, such as touch, texture, etc

Determination of Spreadability

Spreadability may be expressed by area extent to which the topical application spreads when applied to the parts of the skin that is affected. A sample of known weight was applied to a known area and the spreadability factor was determined.

Determination of Solubility

The solubility of the formulation was checked in different mediums, measures the solubility of solid drug compounds in liquid immersions

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Determination of Absorption

The amount of formulation absorbed in a given area was observed. Kin absorption is a route by which substances can enter the body through the skin

Determination of the Type of Smear

It was determined by applying the solid perfume on the skin surface of a human volunteer. After applying solid Perfume, the type of smear or film formed on the skin was checked.

Determination of Emolliency

Slipperiness, emollience, and amount of residue left after applying fixed amounts of cream were checked.

Determination of Physical Appearance

The physical appearance of solid perfume was inspected visually against adark background. After feel. The nature of the skin texture on the applied area was assessed after the application of the formulation. Ease of Removal The ease of removal of the cream applied was determined by washing the applied part with tap water.

Irritancy test.

An area was marked on one dorsal part of the hand. The prepared solid perfume was applied and the time was noted down. It was continuously monitored for any kind of irritancy or allergic reactions at regular time intervals for 24 hours.

PH evaluation

The pH guideline for topical preparations in contact with the skin was between 4 and 8. The pH value was predicted To be neither excessively acidic nor too alkaline, since both might cause discomfort and flaky skin. The final solid Perfume was tested using universal pH paper and had a pH of 6. This pH level was shown to be safe for topical Preparation for human skin application.

Stability testing

Solid Perfume Product Stability Test The stability test was designed to evaluate product attributes by examining the product's physical durability under various conditions. For four weeks, solid perfume was tested at room temperature by noting changes in texture, color, and scent.

REFERENCE

[1]. Bassolé, I. H. N.; Juliani, H. R. Essential Oils in Combination and Their Antimicrobial Properties.Molecules 2012, 17 (4), 3989—4006. https://doi.org/lO.3390/molecules17043989.

[2]. Sarkic, A.; Stappen, I. Essential Oils and Their Single Compounds in Cosmetics—a Critical Review. Cosmetics 2018, 5 (1), 11. https://doi.org/10.3390/cosmetics5010011.

[3]. Sharmeen, J. B.; Mahomoodally, F. M.; Zengin, G.; Maggi, F. Essential Oils as Natural Sources of Fragrance Compounds for Cosmetics and Cosmeceuticals. Molecules 2021, 26 (3), 666. https://doi.org/lO.3390/molecules26030666.

[4]. Buckle, J. Basic Plant Taxonomy, Basic Essential Oil Chemistry, Extraction, Biosynthesis, and Analysis. Clinical Aromatherapy 2015, 37—72. https://doi.org/lO.1016/b978-O70205440-2.00003-6.

[5]. Bassolé, I. H. N.; Juliani, H. R. Essential Oils in Combination and Their Antimicrobial Properties.Molecules 2012, 17 (4), 3989—4006. https://doi.org/lO.3390/molecules17043989.

[6]. Zarzo, M.; Stanton, D. T. Understanding the Underlying Dimensions in Perfumers' Odor Perception Space as a Basis for Developing Meaningful Odor Maps. Attention, Perception & Psychophysics 2009, 71 (2), 225—247. https://doi.org/lO.3758/app.71.2.225.

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[7]. Pal, R. S.; Wal, P.; Kumar, P.; Pal, Y.; Sheetal, S. Herbal Solid Perfume: A Turkish Concept-Based Synthesis And Quality Valuation. World Journal of Environmental Biosciences 2021, 10 (2), 37—41.https://doi.org/lO.51847/aixafnrrir.

[8]. Amerongen, C. C. A.; Ofenloch, R. F.; Cazzaniga, S.; Elsner, P.; Gongalo, M.; Naldi, L.; Svensson, Å.; Bruze, M.; Schuttelaar, M. L. A. Skin Exposure to Scented Products Used in Daily Life and Fragrance Contact Allergy in The European General Population – the EDE

[9]. Hofmann, E.; Schwarz, A.; Fink, J.; Kamolz, L.-P.; Kotzbeck, P. Modelling the Complexity of Human Skin in Vitro. Biomedicines 2023, 11 (3), 794. https://doi.org/10.3390/biomedicines1 1030794.

[10]. Boukhatem, M. N.; Setzer, W. N. Aromatic Herbs, Medicinal Plant-Derived Essential Oils, and Phytochemical Extracts as Potential Therapies for Coronaviruses: Future Perspectives. Plants 2020, 9 (6), 800. https://doi.org/10.3390/plants9060800.

[11]. Boukhatem, M. N.; Setzer, W. N. Aromatic Herbs, Medicinal Plant-Derived Essential Oils, and Phytochemical Extracts as Potential Therapies for Coronaviruses: Future Perspectives. Plants 2020, 9 (6), 800. https://doi.org/10.3390/plants9060800.

[12]. Ali, B.; Al-Wabel, N. A.; Shams, S.; Ahamad, A.; Khan, S. A.; Anwar, F. Essential Oils Used in Aromatherapy: A Systemic Review. Asian Pacific Journal of Tropical Biomedicine 2015, 5 (8), 601—611. https://doi.org/l().1016/j.apjtb.2015.05.007.

[13]. Fratini, F.; Cilia, G.; Turchi, B.; Felicioli, A. Beeswax: A Minireview of Its Antimicrobial Activity and Its Application in Medicine. Asian Pacific Journal of Tropical Medicine 2016, 9 (9), 839—843. https://doi.org/l().l()16/j.apjtm.2016.07.003.

[14]. Dhifi, Bellili, S.; Jazi, S.; Bahioul, N.; Mnif, W. Essential Oils' Chemical Characterization and Investigation Of Some Biological Activities:A Critical Review.Medicines 2016, 3 (4), 25. https://doi.org/10.3390/medicines3040025.

[15]. Sharmeen, J. B.; Mahomoodally, F. M.; Zengin, G.; Maggi, F. Essential Oils as Natural Sources of Fragrance Compounds for Cosmetics and Cosmeceuticals. Molecules 2021, 26 (3),666.https://doi.org/lO.3390/molecules26030666.

[16]. Shah G, Shri R, Panchal V, Sharma N, Singh B, Mann AS. Scientific basis for the therapeutic use of Cymbopogon citratus, stapf (Lemon grass). J Adv Pharm Technol Res.2011 Doi: 10.4103/22314040.79796. PMID: 22171285; PMCID: PMC3217679

[17]. Durand, G. M.; Bennett, M. R.; R. Suzanne Zukin. Splice Variants of the N- MethylDAspartate Receptor NRI Identify Domains Involved in Regulation by Polyamines and Protein Kinase C. 1993, 90 (14), 6731-6735.https://doi.org/10.1073/pnas.90.14.6731.

[18]. Gonzålez-Mas, M. C.; Rambla, J. L.; L6pez-Gresa, M. P.; Blåzquez, M. A.; Granell, A. Volatile Compounds in Citrus Essential Oils: A Comprehensive Review. Frontiers in Plant Science 2019, 10. https://doi.org/lO.3389/fpls.2019.00012.

[19]. Jones, C. W.; Keeling, C. 1.; Ghisalberti, E. L.; Barbour, E. L.; Plummer, J. A.; Bohlmann, J. Isolation of CDNAs and Functional Characterisation of Two Multi-Product Terpene Synthase Enzymes from Sandalwood, Santalum Album L. 2008, 477 (1), 121—130. https://doi.org/l().1016/j.abb.2008.05.008.

[20]. Newton, V.; Brown, A.; Andres, P.; Mandary, M. B.; Weyers, C.; Latouche-Veerapen, M.;

[21]. Hettiarachchi, D. Antioxidant and Anti-Aging Potential of Indian Sandalwood Oil against EnvironmentalStressors in Vitro and Ex Vivo. Cosmetics 2021, 8 (2), 53.https://doi.org/lO.3390/cosmetics8020053.

[22]. Avathar singh Rahi, Perfume that you think makes you Smell attractive is more likely damaging environment and Your health, International Journal of Current Research in Chemistry and pharmaceutical sciences 2016; 3(1): 16-20.

[23]. Thierry Stora, Sergy (FR), Transparent perfume Composition US6403109, Jun. 11,2002

[24]. Suwirakorn Ophaswongse, Howard I.Maibach, Alcohol Dermatitis: allergic contact and contact urticaria syndrome ,Contact Dermatitis 1994;30:1-6.

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[25]. Anton C. de Groot, Dermatological problems linked to Perfumes, Journal of Toxicology-cutaneous & ocular Toxicology 2002; 21(3), 265–271.

[26]. Baqueiro-Peña, I., & Guerrero-Beltrán, J. Á. (2017). Vanilla (Vanilla planifolia Andr.), its residues and other industrial By-products for recovering high value flavor molecules: A Review. Journal of Applied Research on Medicinal and Aromatic Plants, 6, 1-9.Barwich, A. S. (2016). Making sense of smell. The Philosophers' Magazine, (73), 41-47.

[27]. Bernal, J. L., Jiménez, J. J., del Nozal, M. J., Toribio, L., & Martín, M. T. (2005). Physico-chemical parameters for the Characterization of pure beeswax and detection of Adulterations. European Journal of Lipid Science and Technology, 107(3), 158-166.

[28]. Boukhatem, M. N., & Setzer, W. N. (2020). Aromatic herbs, Medicinal plant-derived essential oils, and phytochemical Extracts as potential therapies for coronaviruses: future Perspectives. Plants, 9(6), 800.

[29]. Brandt, J., Shearer, B., & Morgan, S. G. (2018). Prescription drug Coverage in Canada: a review of the economic, policy and Political considerations for universal pharmacare. Journal Of Pharmaceutical Policy and Practice, 11(1), 1-13.

[30]. Chavan, P., Kalshetty, M., & Navindgikar, N. (2020). Formulation & Evalution of Polyherbal Cream. International Journal of Current Pharmaceutical Research, 12(4), 75-77.

[31]. Maysarah, H., Sari, I., Faradilla, M. and Elfia Rosa, E., 2020. Stick perfume formulation from Jeumpa flowers (Magnolia champaca (L) Baill ex. Pierre). In Proceedings of the 2ndInternational Conference of Essential Oils (ICEO 2019), L (pp. 47-53).

[32]. Herbal Solid Perfume: ATurkish Concept-Based Synthesis and Quality Valuation Joshi, D.D., 2012. Herbal drugs and fingerprints: evidence based herbal drugs. Springer Science & Business Media.

[33]. Baser, K.H.C. and Buchbauer, G., 2009. Handbook of essential oils: science, technology, and applications. CRC press

[34]. K.M. Khidzir, S.-F. Cheng, and C.-H. Chuah, Interspeciesvariation of chemical constituents and Antioxidant capacity of extracts from Jasminum sambac and Jasminum multiflorumgrown in Malaysia, Industrial Crops and Products, vol. 74,pp. 635 641, 2015.

[35]. Simpson, B.B. and Conner-Ogorzaly, M., 2013. Plants in our world: economic botany. McGraw-Hill Education.

[36]. Shindhe, P.S., Killedar, R.S., Laxmikant, S.D., Santosh, Y.M. and Madiwalar, M., 2020. Evaluation of Wound healing activity of Jatyadi Ointment and Jatyadi Taila in the management of clean wound (Shuddha Vrana) A randomised controlled trial. Annals Ayurveda Med, 9, pp.98-107.

[37]. Sung, W.C. and Lin, Y.C., 2017. Qualities of cookie made with beeswax-coconut oil organogels as Replacement for shortening. Journal of Food and Nutrition Research, 5(9), pp.697-707.

[38]. Bernal, J.L., Jiménez, J.J., del Nozal, M.J., Toribio, L. and Martín, M.T., 2005. Physicochemical Parameters for the characterization of pure beeswax and detection of adulterations.

[39]. Ng, Y.J., Tham, P.E., Khoo, K.S., Cheng, C.K., Chew, K.W. and Show, P.L., 2021. A Comprehensive review on the techniques for coconut oil extraction and its application. Bioprocess and Biosystems engineering, 44(9), pp.1807-1818.

[40]. Nagdeve, M., 2020. Properties of coconut oil. Organic facts.

[41]. Sulong, M.F., 2006. Extraction of essential oil from jasmine flower using solvent extraction method (Doctoral Dissertation, Thesis]. Malaysia: Faculty of Chemical & Natural Resources Engineering, Universiti Malaysia Pahang).

[42]. Faisal, M., 2006. Extraction of essential oils from jasmine flower using solvent extraction method (Doctoral Dissertation, Universiti Malaysia Pahang).

[43]. Baser, K.H.C. and Buchbauer, G., 2009. Handbook of essential oils: science, technology, and applications. CRC press

[44]. K.M. Khidzir, S.-F. Cheng, and C.-H. Chuah, Interspeciesvariation of chemical constituents and Antioxidant capacity of extracts from Jasminum sambac and Jasminum multiflorumgrown in Malaysia, Industrial Crops and Products, vol. 74,pp. 635 641, 2015.

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[45]. Simpson, B.B. and Conner-Ogorzaly, M., 2013. Plants in our world: economic botany. McGraw-Hill Education.

[46]. Shindhe, P.S., Killedar, R.S., Laxmikant, S.D., Santosh, Y.M. and Madiwalar, M., 2020. Evaluation of Wound healing activity of Jatyadi Ointment and Jatyadi Taila in the management of clean wound (Shuddha Vrana) A randomised controlled trial. Annals Ayurveda Med, 9, pp.98-107.

[47]. Sung, W.C. and Lin, Y.C., 2017. Qualities of cookie made with beeswax-coconut oil organogels as Replacement for shortening. Journal of Food and Nutrition Research, 5(9), pp.697-707.

[48]. Bernal, J.L., Jiménez, J.J., del Nozal, M.J., Toribio, L. and Martín, M.T., 2005. Physicochemical Parameters for the characterization of pure beeswax and detection of adulterations.

[49]. Simpson, B.B. and Conner-Ogorzaly, M., 2013. Plants in our world: economic botany. McGraw-Hill Education.

[50]. Sung, W.C. and Lin, Y.C., 2017. Qualities of cookie made with beeswax-coconut oil organogels as Replacement for shortening. Journal of Food and Nutrition Research, 5(9), pp.697-707.

[51]. Ng, Y.J., Tham, P.E., Khoo, K.S., Cheng, C.K., Chew, K.W. and Show, P.L., 2021. A Comprehensive review on the techniques for coconut oil extraction and its application. Bioprocess and Biosystems engineering, 44(9), pp.1807-1818.

[52]. Sulong, M.F., 2006. Extraction of essential oil from jasmine flower using solvent extraction method (Doctoral Dissertation, Thesis]. Malaysia: Faculty of Chemical & Natural Resources Engineering, University Malaysia Pahang).

[53]. Faisal, M., 2006. Extraction of essential oils from jasmine flower using solvent extraction method (Doctoral Dissertation, University Malaysia Pahang).