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Formulation and Assessment of the Solid Wax Perfumes Using Essential Oil

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ABSTRACT:

Solid Scents, formulated using a combination of natural waxes, canvases, and essential canvases, have gained fashionability as a sustainable volition to traditional liquid scents. This study explores the expression and evaluation of solid scents, fastening on their physical characteristics, scent intensity, and life. The solid incense was prepared by melting natural waxes and canvases, incorporating essential canvases, and allowing the admixture to solidify. Colorful tests, including organoleptic, specific graveness, scent resistance, spreadability, perceptivity, physical stability, pH, and hedonic tests, were conducted to assess the quality and performance of the solid incense. This study demonstrates the eventuality of solid scents as a natural and sustainable volition to traditional scents, with farther exploration recommended to explore different essential canvases and their impacts on sensitive and functional parcels.

INTRODUCTION:

The term" incense" originates from the Latin word incense, “meaning” through bank. Over time, a vast array of flavors and spices has been introduced into diurnal life, encompassing foods, potables, confectionary, particular care products (similar as detergents, toothpastes, mouthwashes, deodorants, bath poultices, and soaps), scents, other cosmetics, and pharmaceutical phrasings. Adding scent enhances the appeal of these products or masks unwelcome tastes or smells.

Solid Scents, as opposed to traditional liquid bones, are drafted on a solid base similar as beeswax or Vaseline, easing easy melting for scent blending and solidification at room temperature. They're applied directly to the skin using fritters or a cotton tar. The intensity of the scent is determined by the attention of essential canvases employed. Compact and movable, solid scents offer a accessible way to carry scent on the go.

Solid scents containing essential canvases have gained fashionability as a natural and sustainable volition to traditional liquid scents'. In this study, a solid incense was formulated using a combination of natural waxes, canvases, and essential canvases. The solid incense was prepared by melting the wax and oil painting, adding the essential oil painting, and pouring the admixture into a vessel to solidify". The physical characteristics of the solid incense were estimated, including texture, appearance, and melting point. The scent intensity and life of the solid incense were also anatomized using olfactory testing natural and sustainable volition to traditional scents. Farther studies could explore the use of different essential canvases and their implicit benefits in solid scents, as well as the impact of expression on the sensitive and functional parcels of the product.

AIM & OBJECTIVES:

Aim: The aim of the project was to formulate and evaluate solid wax perfume.

Objectives:

- To prevent unpleasant body odors.
- To enhance self-confidence.
- To provide skin hydration and nourishment.

- To address skin issues like dryness, greasiness, and sensitivity.
- To induce feelings of optimism.

Table:- List of Ingredients Required for Solid Perfume Preparation

Sr. No.	Ingridient	Quantity taken(10g)	Role
1.	Beeswax	30%	Thickener
2.	Almond oil	40%	Skin softener
3.	Orange oil	10%	Fragrance
4.	Sandalwood oil	10%	Fragrance
5.	Cedarwood oil	7%	Fragrance
6.	Vit. E	3%	Antioxident

MATERIALS AND METHODS:

Raw Materials: The selected materials used to prepare the solid perfume are derived from natural origins. And the formulation of solid perfume requires three main ingredients, these are:

• Bees wax

• Essential oils

• Carrier oils

1. Beeswax

When secreted by the bee, the pure beeswax is almost white; only after contact with honey and pollen it assumes a variably intense yellowish color and turns brown after about four years, because it contains the cocoon. In recent years, beeswax has been shown to have antimicrobial properties when combined with other natural ingredients.

2. Carrier oil:

- Jojoba oil

This formulation uses jojoba oil as a carrier oil. Essential oils are transported to your skin and diluted using carrier oils. Jojoba oil doesn't clog pores and absorbs readily into the skin. This makes it a suitable choice for a carrier oil for perfumes, bath oil, and massage oil.

- Almond oil

World Journal of Pharmaceutical Research The seeds of the Prunusdulcis plant, a member of the Rosaceae family, yield a golden-yellow oil that is chemically composed of 40–50% fixed oil, 20% proteins, mucilage, emulsion, and 2.5–4% amygdalins. These oils serve as a medium for this composition and are also known as nourishing or moisturizing oils. Numerous skin-beneficial substances, such as vitamins, minerals, fatty acids, and antioxidants, can be found in almond oil. Its pleasant underlying note of light nutty aroma elevates the whole smell experience.

3. Essential oil:

Essential oils are valuable assets in the cosmetic sector because, in addition to giving pleasant smells in various products, they may work as preservatives and active agents while also providing numerous skin advantages". Furthermore, the increasing demand for natural ingredients has contributed significantly to a renewed interest in plant derivatives, particularly essential oils, in the cosmetic and wellness industries.

- Orange essential oil

orange essential oil (Citrus Sinensis), commonly named as sweet orange, is a member of the Rutaceae family. the orange scent is a suitable aroma to decrease anxiety.

The main chemical constituents of Orange Oil are: Limonene, Monoterpene Hydrocarbons, Alcohols, and Aldehydes (Neral). LIMONENE is believed to exhibit the following activity: Anti-oxidant. Stimulant. Orange oil can be. extracted by various conventional methods like steam distillation, and solvent extraction. Novel methods. like supercritical C02 extraction, turbo distillation also has been employed.

- Sandalwood oil

It is widely used in fragrance, cosmetics and aromatherapy. The adoption Of a novel green approach for extracting. Essential oil with least amount of Energy, solvent and time must be exploded by microwave hydro Distillation process.

- Cedarwood oil

Cedarwood oil has anti-inflammatory and antimicrobial properties. This may make it beneficial for skin conditions like acne, but there's limited evidence supporting this claim.At present, there's no scientific research showing that cedarwood oil can help to heal acne. If you do want to try it, be sure to dilute it in a carrier oil and patch test it before applying it to your face.

- Khus

Khus" (also spelled "Khas") refers to a fragrant grass, Chrysopogon zizanioides, commonly known as vetiver, and its root is used in various applications. It's primarily cultivated for its essential oil, which is highly fragrant and used in perfumes, aromatherapy, and cosmetics. The root is also used in traditional Indian medicine and as a flavoring in drinks like khus sharbat.

- Uses of Khus:
- Fragrant Essential Oil:
- The most common use of khus is for its essential oil, which is extracted from the roots. This oil is known for its earthy, woody aroma and is used in perfumes, soaps, lotions, and other cosmetic products.

Method of Preparation

1. Using a weighing balance, weigh 3.0 g of beeswax (30%).

2. Using a measuring cylinder, weigh 3.0ml of almond oil (30%),1 ml sandalwood oil (10%), 0.7 ml cedarwood oil (7%),1mlorange oil (10%), 1.0 ml khus (10%).

3. A 50 ml beaker containing beeswax, and almond oil was heated over a water bath until the ingredients melted.

4. In a second 50ml beaker, 1 ml of sandalwood oil and 1 ml of orange oil, 1ml khus,0.3 ml vitamin E oil (3%), 0.7 ml cedarwood oil (7%), were combined at the same time.

5. Fill the storage container with the beeswaxand almond oil mixture.

6. After the liquid has cooled for a minute, stir gently and add the essential oil combination.

7. The perfume was allowed to cool before usage after the lid was shut.

1 Organoleptic assessment

World Journal of Pharmaceutical Research In organoleptic assessment of solid perfume following points should be observed.

1. Color

2. Odor

3. Appearance

4. Roughness

5. Texture grade.

Physical assessment

- Determination of unity

The phrasings were tested for unity by touch and visual appearance.

- Determination of spreadability

Spreadability may be expressed by area extent to which the topical operation spreads when applied to the corridor of the skin that's affected. Sample of given weight was applied on a given area and spreadability factor was determined.

- Determination of solubility

The solubility of the expression was checked in different mediums.

- Determination of immersion

The quantum of expression absorbed in a given area was observed.

- Determination of the type of smear

It was determined by applying the solid incense on the skin face of a mortal win. After applying solid incense, the type of smear or film formed on the skin was checked.

- Determination of Physical appearance

The physical appearance of solid incense was audited visually against a dark background.

- After sense

The nature of the skin texture on the applied area was assessed after the operation of the expression.

- Ease of junking

The ease of junking of the cream applied was determined by washing the applied part with valve water.

- Irritancy test

World Journal of Pharmaceutical Research An area was marked on one rearward part of the hand. The set solid incense was applied and the time was noted down. It was continuously covered for any kind of irritancy or antipathetic responses at regular time intervals for 24 hours.

- pH Test of Solid Perfume Formulation

pH standard for topical medication in contact with skin was about 4- 8. The pH value was anticipated not to be too acidic because it can beget vexation and not too alkaline because it can beget scaled skin. The performing solid incense was tested using universal pH paper and had pH value of 6. This pH value was considered safe for topical medication for mortal skin operation.

Result:

1. **Organoleptic Properties**

Sr. No.	Parameter	Observation	Inference
1.	Color	Yellowish	Yellowish
2.	Texture Grade	Smooth	Even formulation and proper blending of ingredients
3.	Odor	Refreshing odor	Smooth and refreshing odour
4.	Visual aspect	Homogenous	Formulation was homogenous
5.	Softness	Present	Formulation was soft

2. **Physical Evaluation**

Sr. No.	Parameter	Observation	Inference
1.	Uniformity	Firm and consistency	Formulation is uniform
2.	Ability to spread	Spread Consistent	Formulation has good spreading -ability.
3.	Solubility	Water-insoluble	Formulation is both hydrophobic and lipophilic
4.	Absorbtion	Easily absorbs on the skin	Formulation absorbs easily into the skin.
5.	Emolliency	No residue is seen because of its smoothness	Formulation is consistent and uniform.
6.	Smear kind	Greasy	Oils are used in the formulation.

7.	Ease of removal	Cannot be eliminated by the tap water, may require soap/detergent	Formulation contains an oily base.
8.	Irritancy	No irritancy was observed or feel	Formulation is non-irritant
9.	pH	6	6
10.	Skin felt	Skin felts soft and smooth	Formulation is smooth and firm.

CONCLUSION:

The study focused on- formulating and evaluating a solid perfume, containing orange extract. The formulated solid perfume was yellowish in colour, had a smoothy woody odour, uniform texture and solid consistency. Evaluation indicated that, a solid perfume feels soft on skin and non-irritant in nature. The solid perfume formulated in this project is a unique and innovative product that combines the benefits i.e. fragrance, moisturizing and convenience. Ingredients like beeswax and carrier oils provide moisture, making it suitable for sensitive skin also. The solid form of a perfume makes it easy to apply and transport, while its natural ingredients ensure that's it is safe and gentle on the skin. This solid perfume is an excellent alternative traditional liquid perfume, offering a convenient, moisturizing, and fragrant experience i.e. perfect for everyday use.

Solid perfumes offer a convenient, eco-friendly, and travel-friendly alternative to traditional liquid fragrances. With their compact size, long-lasting scent, and natural ingredient options, they appeal to individuals seeking a personalized and sustainable way to enjoy fragrance. Whether for daily use or on-the-go application, solid perfumes blend functionality with elegance, making them a timeless choice in the world of personal scents.

Solid perfume is a practical and stylish alternative to liquid fragrances. It is easy to carry, spill-proof, and often made with natural ingredients, making it a great option for everyday use. With its long-lasting scent and eco-friendly packaging, solid perfume is becoming a popular choice for people who want a convenient and sustainable way to stay fresh and fragrant.

Fig. 1: Solid Wax Perfume

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