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Herbs Use For Aromatherapy And Preparation Of Stress Relavent Candle

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ABSTRACT: -

Nowadays, use of alternative and complementary therapies with mainstream medicine has gained the momentum. Aromatherapy is one of the complementary therapies which use essential oils as the major therapeutic agents to treat several diseases. The essential or volatile oils are extracted from the flowers, barks, stem, leaves, roots, fruits and other parts of the plant by various methods. It came into existence after the scientists deciphered the antiseptic and skin permeability properties of essential oils. Once the oils are in the system, they remodulate themselves and work in a friendly manner at the site of malfunction or at the affected area. Herbal plants contain various biologically active compounds that are useful for life enhancement and they are the main origins of modern and conventional herbal medicine for the prevention of diseases. The study aimed to formulated and develop herbal candle using Essential oils in combination. F1, F2, F3, where prepare by varying composition and evaluated for their physicochemical property. The study shows that formulation F3 was found to be effective due to large quantity of Essential oil. The test showed that the manufactured herbal candle had become more effective, Cheaper and non-poisonous than the candle repellents currently available on the market based on chemical in fighting mosquitoes, scent consistency, etc.

Key word: aromatherapy, candle, essential oil (lavender, chamomile, citronella, eucalyptus).

1. INTRODUCTION

Aromatherapy is defined as “The art and science of utilizing naturally extracted aromatic essences from plants to balance, harmonize and promote the health of body, mind and spirit”. ^[1] Aromatherapy is the use of essential oils from plants for healing. Essential oils have been used for therapeutic purposes for nearly 6,000 years. Ayurveda is a Sanskrit word that, in a real sense interpreted, signifies "study of life;" it remembers the utilization of sweet-smelling oils for restoring and recuperating plans. ^[2] Aromatherapy is used in a wide range of settings from health to hospitals to treat a variety of conditions. In general, it seems to relieve pain, improve mood, and promote a sense of relaxation. In fact, several essential oils including lavender, rose, orange, bergamot, lemon, sandalwood, and others have been shown to relieve anxiety, stress. The nature of different kind of life supporting voters of plants that have been studied by scientists for their applications. The purpose of the research was to develop herbal candle used for aromatherapy and as a mosquito repellent that would include the essential oil of chamomile oil, citronella oil, eucalyptus oil and Levander oil ^[1]

CLASSIFICATION OF AROMATHERAPY

1. Cosmetic aromatherapy: This treatment uses certain basic oils for skin, body, face and hair corrective items. These items are utilized for their different impacts as purging, saturating, drying and conditioning. A sound skin can be gotten by utilization of basic oils in facial items. On an individual level, corrective fragrance-based treatment of full body or foot shower will be a basic and a successful method to have an encounter ^[3]

2. Massage aromatherapy: The utilization of grape seed, almond, or jojoba oil in unadulterated vegetable oil during rub has been appeared to have great impacts. This is otherwise called mending hint of back rub treatment ^[4,5].

3. Medical aromatherapy: The organizer of present-day fragrant healing has utilized basic oils to knead patients during medical procedure, in this way using the clinical fragrance- based treatment information on the impact of essential oils on advancing and treating clinically analyzed clinical afflictions ^[6]

4. Olfactory aromatherapy: Inward breath of basic oils has offered ascend to olfactory fragrance-based treatment, where basic inward breath has brought about improved passionate well-being, smoothness, unwinding or restoration of the human body. The arrival of stress is welded with pleasurable aromas which open scent recollections. Basic oils re supplemented to clinical treatment and can never be taken as a swap for it. ^[7,8]

5. Psycho-aromatherapy: In psycho-fragrant healing, certain conditions of temperaments and feelings can be gotten by these oils giving the joy of unwinding, fortification or a lovely memory. The inward breath of the oils in this treatment is immediate however the implantation in the room of a patient. Psycho-fragrant healing and aroma ology, both arrangement with the investigation and impacts of smell be it characteristic or

manufactured. Psycho-fragrance based treatment has restricted itself with investigation of characteristic basic oils.^[9]

Essential oils used in Aromatherapy^[10]

Table 1: List of essential oils Extracted from Plant Sources

Sr. no.	Essential oil	Botanical name	Uses
1	Chamomile oil	<i>Matricaria recutitia</i>	Wound healing, anxiety
2	Eucalyptus oil	<i>Eucalyptus globulus</i>	Treat arthritis, boils sores
3	Eucalyptus oil	<i>Eucalyptus globulus</i>	Treat arthritis, boils sores
4	Lavender oil	<i>Lavandula angustifolia</i>	Reduce depression
5	Citronella oil	<i>Cymbopogon winterianus</i>	Improve mood
6	Agar wood oil	<i>Aquilaria malaccensis</i>	Treat Insomnia
7	Ajwan oil	<i>Trchyspermum ammi</i>	Reduce anxiety
8	Angelica root oil	<i>Angelica arenangelica</i>	Anxiety
9	Anise oil	<i>Pimpinella anisnm</i>	Migrines
10	Balsam of Peru	<i>Myeoxyylon balsamum pereirae</i>	Used in perfume
11	Basil oil	<i>Ocium basilium</i>	Calm, uplift the mind
12	Bergamot oil	<i>Citrus bergamia risso et poiteau</i>	Increase positive mood
13	Birch oil	<i>Betula lenta</i>	Cooling sensation
14	Black pepper oil	<i>Piper nigrum</i>	Blood sugar control
15	Black seed oil	<i>Nigella sativa</i>	Asthma
16	Calamondin oil or Calamansi oil	<i>Citofortunella microcarpa</i>	Calming, help refocus your energy
17	Calamus oil	<i>Acorus calamus</i>	Loss of appetite
18	Camphor oil	<i>Cinnamomum camphora</i>	Diminish nervousness
19	Cannabis flower essential oil	<i>cannabidiol</i>	Anxiety
20	Caraway seed oil	<i>Carum carvi</i>	Relieve spasms
21	Cardamum seed oil	<i>Elettasia caradamomum</i>	Calms & relaxing atomosphere
22	Carrot seed oil	<i>Daucus carota</i>	Improve dermal health
23	Cinnamon oil	<i>Cinnamomum zeylaniaum</i>	Reduce depressant
24	Clary sage oil	<i>Salvis sclarea</i>	Anti-bacterial

25	Clove oil	<i>Eugenia caryophyllata</i>	Healing property
26	Coconut oil	<i>Cocos nucifera</i>	Treat psoriasis
27	Coffee oil	<i>Coffea arabica</i>	Increase immunity
28	Coriander oil	<i>Coriandrum sativum</i>	Reduce swelling in joints
29	Costmary essential oil/ Bible leaf oil	<i>Tanacetum balsamita</i>	Treat wound
30	Costos root oil	<i>Saussurea lappa</i>	Use in Perfume
31	Cranberry seed oil	<i>Vaccinium macroccupon</i>	Anti-oxidant
32	Cubeb oil	<i>Piper cubeba</i>	Antiseptic
33	Cumin seed oil	<i>Cuminum cyminum</i>	Stimulates Appetite
34	Curry leaf oil	<i>Murraya koenigii</i>	Pain relavent
35	Cypress oil	<i>Cupressus sempervirens</i>	Inflammation
36	Capriol oil	<i>Cyperus scariosus</i>	Aromatherapy
37	Davana oil	<i>Artemisia pallens</i>	Reduce pain
38	Dill oil	<i>Anethum graveolens</i>	Reduce anxiety
39	Elecampane oil	<i>Inula racemasa</i>	Improve mood
40	Elemi oil	<i>Canarium luzonicum</i>	Healing property

Introduction To Herbal Candle: -

Aromatherapy candles are a form of diversification of candle products. Aromatherapy candles have many functions, namely as lighting tools, therapeutic media and room fresheners. Aromatherapy candles are an alternative to the application of aromatherapy by inhalation. Aromatherapy candles will produce a scent that provides a calming and relaxing therapeutic effect when burned. ^[11] In relaxation has emerged as a crucial process for alleviating both mental and physical stress. Amid the diverse array of relaxation methods available today, aromatic candles have gained prominence. Scented candles serve as a vital component in health, effectively relieving symptoms associated with, high blood pressure, tension, and insomnia. Moreover, they offer holistic approaches to address emotional and mental stress, grief, and trauma. These scented candles incorporate a range of natural additives, including essential oils, herbs, spices, citrus fruits, berries, musk, oatmeal, and sea breeze.^[10]

Ideal characteristics: -

- 1.It must be Insect repellent [Mosquito repellent].
- 2.It's anti-bacterial, anti-fungal and anti-microbial properties.
- 3.Its Fragrance improve healing property.

4.It is used to reduce anxiety and insomnia.

5.It is used in Inhalation therapy and aromatherapy.

6.It is used to treat headache, nervous disorder.

Objective: -

1. Study of herbs used for aromatherapy.
2. Collection of plant material.
3. extraction of plant material.
4. Evaluation of essential oil.
5. Formulation of herbal candle using essential oil.
6. Evaluation of Herbal candle

2.MATERIAL AND METHOD

Table no. 2 List of Ingredient and Source

Sr No.	Ingredient	Source	
1	Eucalyptus extract	Prepared in lab of MIBP Gondia	
2	Lavender oil	Essancia_living	
3	Chamomile oil	Essancia_living	
4	Citronella	Essancia living	
5	White bees wax	Myoc cosmetic	

Procedure: -

Table no.3 Preparation of Formulation

1. Take a beeswax and weigh the beeswax accurately.
2. Melt the beeswax in beaker with the help of heating Mantel.
3. After the properly melting Start add the essential oil lavender oil, eucalyptus oil, chamomile oil, citronella oil in beaker.
4. After the adding extract then start the stirrer slowly.
5. Pour above mixture in suitable size of glass container.
6. Then put it in a glass container that has a candle wick in the middle and wait for the wax to solidify into a candle.^[10]

Ingredient	F1	F2	F3
Eucalyptus oil	1ml	1.5ml	2ml
Lavender oil	2ml	2.5ml	3ml
Chamomile oil	2ml	2.5ml	3ml
Citronella oil	1.5ml	2ml	2.5ml
White Bees wax	q. s	q. s	q. s
Total weight of candle	25gm	25gm	25gm



Fig No. 1 Formulation of Candle

EVALUATION OF HERBAL CANDLE

1. Physical evaluation: By help of visualizing the formulation to evaluate the colour and Fragrance.
2. Texture: Weight 1gm of herbal candle and spread on palm and see whether the texture is uniform or not.^[18]
3. Irritancy test: Take three candles and burn them for 2hr.and check whether it cause irritation to skin or eyes.^[19]
4. Measurement of pH: The pH of herbal candle was determined by using pH paper. Take 1ml of herbal candle and deep pH strips keep apart for 10min. the system three time repeated and the average visible value are reported.^[14]
5. Determination of loss on drying: Weight about 1 gm herbal candle of weight flat and thin porcelain dish. Dry in the oven at 100 °C until two consecutive weights do not differ by more than 0.5mg. cool in the desiccators and weigh. The loss is usually recorded as moisture.^[15]
6. Mosquito repellent activity net test: Test conducted using small net. 5 mosquitos are collected in net ad checked for its activity for 25mins.Out of 5 mosquitos were died and 3 repels. The dying percentage of candle for mosquitos is 40% and repelling percentage is 20%.^[17]
7. Uniformity of mass: Take five candles of each group selected and weighed individually. The weight of individual was noted average. weight was calculated and individual weights were compared with average weight.^[20]
8. Burning time: Burning time visualized using 3 candles named as F1, F2, F3 respectively their Burning time is calculated using watch.^[18,20]

10. Rancidity: For evaluation, 5ml of melted herbal candle taken and added to 5ml concentrated hydrochloric acid along with 5ml of phloroglucinol solution. The solution was shaken well for 1 min. The herbal candle shall be taken to have passed the test if no pink colour is developed.^[2]

3.RESULT & DISCUSSION

Table No.4 Pre-Liminary Essential Oil

Sr no.	properties	Lavender	Chamomile	Citronella	Eucalyptus	Bees wax
1	Colour	Light shade of purple /violet	Dark blue colour	Pale yellow to thick yellow	Colourless {yellow with age	Off white
2	Odour	Floral scent	Sweet, straw like fragrance	Lemon -like cirtrusy scent	Rosemary-like mint, citus.	Honey-like
3	Solubility	Soluble in alcohol Insoluble in water	Soluble in alcohol Insoluble in water	Soluble in alcohol Insoluble in water	Soluble in alcohol Insoluble in water	Soluble in alcohol Insoluble in water
4	pH	6.5 to 7.0	5.5	5.8to 6.13	5.78	7.0
5	Boiling point	204°C	180°C	208°C	177°C	204.4°C

Table No.5 Activity of Herbal Candle

Sr. no.	Tests	Observation		
		F1	F2	F3
1	Flammability Test	Flammable	Flammable	Flammable
2	Burning time	23.25min	23.45min	23.55min
3	Mosquito Repellent	Effective against Mosquito repellent activity	Effective against Mosquito repellent activity	Effective against Mosquito repellent activity

Table No.6 Evaluation of Herbal Candle

Sr. No	Tests	F1	F2	F3
1	Colour	Seafoam green	Seafoam Green	Dark seafoam green
2	Odour	Sweet Aromatic	Sweet Aromatic	Sweet Aromatic
3	State	Solid	Solid	Solid
4	Texture	Uniform	Uniform	Uniform
5	Homogeneity	Homogenous	Homogenous	Homogenous
6	Irritancy	Non-irritant	Non-irritant	Non-irritant
7	Melting Point	51 ⁰ C-53 ⁰ C	53 ⁰ C- 55 ⁰ C	54 ⁰ C-56 ⁰ C
8	% Loss on Drying ^[4]	0.4%	0.49%	0.51%
9	pH	7.4	7.6	7.
10	Rancidity ^[6]	No pink color	No pink color	No pink color

		observed hence, no rancidity.	observed hence, no rancidity.	observed hence, no rancidity.
11	Solubility	Soluble in alcohol Insoluble in water	Soluble in alcohol Insoluble in water	Soluble in alcohol Insoluble in water



Fig No. 2 Solubility Test



Fig No.3 Melting of Wax With Essential Oil

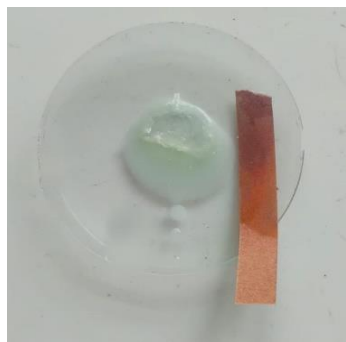


Fig No.4 Ph Test

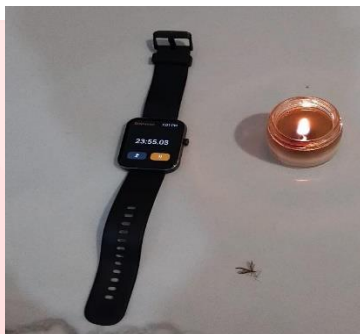


Fig No. 5 Burning Time



Fig No.6 Rancidity

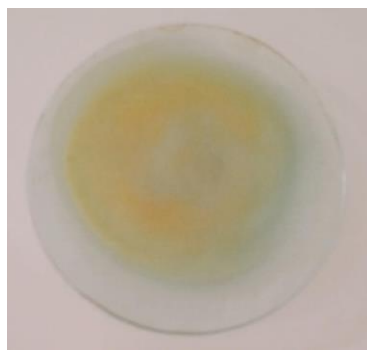


Fig No. 7 Loss on Drying



Fig No. Net Test



Fig No. Flammability Test

4.DISCUSSION: -

On basis of evaluation test studies and observations, it's found that the candle was done successfully using various try outs. Formulated candle was tested in laboratory room temperature. By burning a herbal candle, it is observed that it relax the mind and reduce stress due to the presence of essential oil as chamomile and give fragrance due to the presence of eucalyptus oil and lavender oil also by burning the candle with adequate number of mosquitoes, the burning efficiency and time, flammability rate and mosquito repellent activity of candle was assessed. This test shows effectiveness because of natural essential oils present in candle such as citronella which is known for their mosquito repellent activity. These essential oils were incorporated into melted wax. The mixture was poured into suitable container Candle was observed for its safety, efficacy.

5.CONCLUSION: -

Can be concluded prepared herbal candle is made using natural essential oils, it does not cause any irritation to skin or any allergic reaction. The herbal candle is very easy to use and handle as it is light in weight. Herbal candle is beneficial for repelling mosquitoes, reducing stress, relax mind, peaceful sleeping and human health also. It concludes that used essential oils was very safe and effective to use for aromatherapy and mosquito repellent. The study aimed to formulated and develop herbal candle using Essential oils in combination. F1, F2, F3, where prepare by varying composition and evaluated for their physicochemical property. The study shows that formulation F3 was found to be effective due to large quantity of essential oil.

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