

WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.084

Volume 13, Issue 4, 905-916.

Review Article

ISSN 2277-7105

PREPARATION AND EVALUATION OFHERBAL DHOOPBATTI FOR CLEANSING THE AIR

Pitale Shivkanya Bhagwat*¹, Sadle Jyoti Vijaykumar², Shaikh Sameena Ibrahim³ and Dharashive V. M.⁴

^{1,2}Student of Shivlingeshwar College of Pharmacy, Almala.

³Assistant Professor of Shivlingeshwar College of Pharmacy, Almala.

⁴Principal of Shivlingeshwar College of Pharmacy, Almala.

Article Received on 01 January 2024,

Revised on 22 Jan. 2024, Accepted on 11 Feb. 2024

DOI: 10.20959/wjpr20244-31386



*Corresponding Author
Pitale Shivkanya Bhagwat
Student of Shivlingeshwar
College of Pharmacy,
Almala.

ABSTRACT

In various religions function such as havan/homa, Pooja used in fumigation to remove microbial in the environment. Herbal Dhoopbatti prepared from herb and cow product as like cow milk, cow dung, cow ghee and other medicinal plant. Herbal dhoopbatti prevent various air borne bacteria disease. it also work as a mosquito repellent due to presence of cow dung components the ash of dhoopbatti is also useful. Herbal dhoopbatti material is easily available and profitable raw material. Herbal dhoopbatti is used in various area such as temple, office, household, shops, hospital etc. Now day's people use various chemical containing products such as room freshener and disinfectant. With an aim to minimize the usage of disinfectant or chemical to clean the air. Dhoopbatti is purifying the atmosphere, calming effect of the mind.

KEYWORDS: Fumigation, Dhoopbatti, Mosquito Repellent, Disinfectant etc.

INTRODUCTION

Several traditional ways analogous as Dhoopana and have been used in the fumigation to Minimize the microbial in the terrain. A clean terrain that includes clean air, water, land, and energy, it is essential for mortal actuality. Dhoopana is said to be extremely effective in preventing as well as restorative aspects, yet, there remains a sample compass in this area as its practice is rarely in use Herbal products to cleanse the air in particular area & produce the positive atmosphere with the help of scent. Mosquito born complaint construct multitudinous

mortal health problem eg. fever dengue etc. The Ayurveda system Works by maintaining a balance between the body, mind, soul, and spirit of an existent. Fumigation process Dhoopana as described in Ayurveda is a system of drug delivery through Inhalation. The steady pollution has gathered the study of numerous millions. The extent of constant pollution command drains the attention of the people. The current study focuses on the progress of an herbal gau Dhoopbatti and its antibacterial exertion which can be successfully used for inhibit the bacterial growth, the expression were developed using natural factors similar as cow ghee, cow soil, colorful corridor of medicinal factory which are known traditionally for medicinal and antibacterial activity. In numerous persuasions while performing practices like home or havens, constituents like cow soil, camphor, urine of cow, cow ghee are used that helps in sanctifying the terrain. Herbal products conduct parcels like scent as well as it induces a sense of positivity in the area it's used in addition to serve the purpose of sanctifying the air. Cow soil has been used since time old as a source of disinfection in different homes to prepare a Dhoop stick having pharmacopoeia quality using colorful cow products and factory maquillages for sanctifying the air. Old as a source of disinfection in different homes. This herbal Dhoop stick is prepared from extremely provident sources and has an affable smell. Herbal products to cleanse the air in a particular area and to produce a positive atmosphere with the help of its perceptible scent. The medication of the Dhoop sticks all the introductory constituents that are needed, are natural. The component includes cow soil, clarified adulation, certain sauces, cow milk. Cow soil has always been used as a detergent from ages. The current exploration focuses on the development of a natural Dhoop stick, which can be effectively used for reducing the count of aeromicroflora.

Dhoopbatti

The name Dhoop came from the name of tree called Dhoop which indigenous to eastern India. A chip from these trees imparts affable scent when they're burnt. Dhoop or Dhoopbatti isn't analogous to incense stick or Agarbatti. Indeed from physical appearance they're different. Incense dry and set up as a result stick but Dhoop is a set up in paste form with little bit of moistness in it.

Type of Dhoopbatti

- 1) Charcoal Type.
- 2) Masala Dhoop Type.

1) Charcoal Type

In preparation of this kind of dhoopbatti an unscented stick is dipped in mixture made up of essential perfumes and oils. Additionally charcoal is added that will act as a fuel to burn the Dhoop. For the purpose of binding the mixture to the stick black resins are used which impart the property of binding.



Figure No. 01:- Charcoal Type.

2) Masala Dhoop Type

Masala dhoop is made by mixing variety of sweet constituents to prepare a solid dhoopbatti. then by using wateror other bonds it's made into, a sticky paste. Different types of natural constituents similar as sandalwood, rubber resins, natural canvases, root excerpts, and leaves and stem of different medicinal shops are employed for medication of masala dhoop.



Figure No. 02:- Masala Dhoop Type.

INGREDIENTS OF HERBAL DHOOPBATTI

| Sr. No. | Ingredient | Scientific name |
|---------|---------------|---------------------|
| 1. | Cow ghee | - |
| 2. | Cow milk | - |
| 3. | Cow dung | - |
| 4. | Camphor | Cinnamomum Camphora |
| 5. | Jasmine | Lavender, Jasmine |
| 6. | Tulsi leaves | Ocimum Sanctum |
| 7. | Guggul powder | Commiphoramukul |

Components of Herbal Dhoopbatti.

1) Camphor

Synonyms: Cinnamomum Camphora

Family: Laurels

- 1. Camphor provides distinctive aromatic fragrance. Camphor a waxy flammable white or
- 2. Transparent solid with a strong aromatic odor, derived from the wood of the camphor tree.
- 3. Camphor is used in various religions and spiritual practices for its pleasant and purifying fragrance.
- 4. It is also used in traditional medicine and as an ingredient in various topical analgesic and decongestant product



Figure No. 03:- Camphor.

2) Tulsi Leaves

Synonyms: holy basil (ocimum tenuiflorum)

Family: labiatae

Tulsi leaves contain variety of components, including essential oils such as eugenol, carvacol, linalool, as well as flavonoids, tannin and other phytochemicals that contribute to its unique aroma and potential health benefit For making dhoopbatti using Tulsi leaves, the components typically include dried and powdered Tulsi leaves, along with other ingredients such as aromatic resin, essential oils, wood powder, and binding agent like charcoal powder these additional component are mixed with the powdered Tulsi leaves to create the desired fragrance and consistency for the incense sticks.



Figure No. 04:- Tulsi Leaves.

Uses

- They are employed in traditional ayurvedic medicine for their potential benefits in treating respiratory issues promotion digestion, and boosting immunity.
- The leaves are used for their pleasant and refreshing aroma in the production of essential oils, perfumes, and incense sticks.
- Tulsi leaves are commonly used to make herbal teas that are believed to have various health benefit, such as promoting relaxation and aiding in digestion.
- Tulsi leaves are used as a flavouring agent in various dishes, teas and beverage, adding district, aromatic flavor to the cuisine.
- Tulsi is considered a sacred plant in Hindu culture and is often used in religious ceremonies and ritual.

3) Jasmine Flower

Synonyms: Lavender.

Jasmine Family: Oleaceae.

Jasmine used can vary depending on the desired fragrance and the manufacturer's recipe jasmine- scented dhoopbatti is popular for its pleasant and soothing aroma.

Jasmine flowers are often used in the production of dhoopbatti (incense sticks) to impart a delightful floral fragrance. To make dhoopbatti with jasmine flowers, the following components are typically used.

Jasmine Flowers: Fresh or dried jasmine flowers are the primary aromatic ingredient, providing the distinct floral scent to the incense.

Wood Powder or Sawdust: A base material like wood powder or sawdust is used to give the

dhoopbatti its structure and to help it burn slowly.

Natural Binding Agents: These can include gums or resins like gum Arabic, frankincense resin, or benzoin resin. These agents help bind the ingredients together and idea consistent texture.

Aromatic Spices and Herbs: Additional aromatic substances like cloves, cardamom, and other herbs and spices may be added to enhance the fragrance.

Essential Oils: Some dhoopbatti recipes include essential oils extracted from jasmine or other.



Figure No. 05:- Jasmine Flower.

4) Cow Dung Powder

As cow urine reported remarkable antibacterial activity against the pathogenic bacteria, for which it can be selected for further studies to isolate bio-active natural constituents that may address to unmet therapeutic need.

Cow dung has Organic material Flavonoids, Glycosides, steroids, Tanning, Phenols which has antibacterial activity.

The medicinal parcels of cow soil have been reported to prepare medicines for quite a lot of conditions caused by antibiotic resistant pathogenic microorganism.

One report have reported about dry cow soil greasepaint conforming humid acid. Which is also The cow, according to the Vedas, gives three products for mortal benefits (i) Godugdha (cow milk) (ii) Goghruta(ghee) (iii) Gomutra(urine). Eight types of urine are used for medicinal purpose, among which cow urine is held to be the stylish, antimicrobial agent.



Figure No. 06:- Cow Dung Powder.

4) Cow Ghee

Cow ghee, or clarified butter, is sometimes used in the production of dhoopbatti (incense sticks) to enhance the aroma and provide a slow-burning quality. When making dhoopbatti with cow ghee, it is typically used as a binding or mixing agent along with other aromatic substances. Here are the basic components for making dhoopbatti with cow ghee.



Figure No. 07:- Cow Ghee.

Aromatic Substances: These can include a wide range of nature 1 ingredients such as resins (like frankincense or myrrh), herbs, spices, and wood powders (such as sandalwood or cedarwood). The choice of these aromatic ingredients determines the fragrance of the dhoopbatti.

Cow Ghee: Cow ghee serves as a binding agent and adds a rich, buttery fragrance to the incense. It also helps the incense stick burn slowly.

Gum or Resin: Natural gums or resins, like gum Arabic or frankincense resin, are often added to the mixture to enhance binding and help the incense hold its shape.

Essential Oils: Some dhoopbatti recipes may include essential oils to intensify the fragrance and provide additional therapeutic properties.

The specific proportions and ingredients used can vary depending on the desired fragrance and the manufacturer's recipe. It's important to note that the production of dhoopbatti is often done by artisans and manufacturers who have their unique recipes and methods for creating these aromatic incense sticks.

6) Guggul Powder

Synonyms: Commiphora Mukul.

Family: Burseraceae.

Guggul is more commonly used in traditional Ayurvedic medicine and as a fragrant resin in incense sticks or ingredient in perfumes. However, it is not a standard or common component in dhoopbatti produces.

The specific ingredients in dhoopbatti can vary depending on the desired fragrance and the manufacturer's recipe.



Figure No. 08: Guggul Powder.

7) Cow Urine

Dhoopbattii is generally made from add mixture of sweet substances like resins, sauces, and wood maquillages, along with nature 1 list agents like epoxies or honey. These constituents are used to produce the asked scent and insure that the incense sticks burn properly. In healthy cows urine doesn't contain protein, glucose and haemoglobin.

Cow's urine is considerably used in the Ayurvedic medicinals for elevating the parcels of numerous medicines, by giving bhavana (repeated trituration). In shodhana (sanctification) of essence used in rectifiers, cow urine was lengthily used. Charka, Sushruta and all other ancient croakers have given major significance to cow's urine.



Figure No. 09:- Cow Urine.

Methods of Preparation

- Cow dung powder, Tulsi powder, Jasmine powder, Guggul powder was mixed with cow urine and water.
- 2. Pure ghee was added after getting a wet mass.
- 3. After that were perfumes added.
- 4. That mixture put into the mould.

Benefits of Using Herbal Dhoopbatti

Dhoopbatti, or incense sticks, are commonly used in many cultures for various purposes, and they offer several potential benefits, including

- Aromatic Fragrance: Dhoopbatti releases pleasant fragrances that can help improve the ambiance and mask unpleasant odors in a room.
- Relaxation and Stress Relief: The soothing aroma of certain incense can promote relaxation reduce stress, making them popular for meditation and yoga practices.
- Spiritual and Religious Use: Dhoopbatti is often used in religious and spiritual 1 rituals to create a sacred atmosphere and enhance the connection with the divine.
- Insect Repellent: Some types of incense can help detect insects, making them useful for keeping bugs away during outdoor activities or in certain living conditions.
- Air Purification: Some incense types are believed to have air-purifying properties and can

help cleanse the environment of impurities.

LIMITATIONS FOR HERBAL DHOOPBATTI

While dhoopbatti (incense sticks) offer colorful benefits, they also have some limitations. Bank and Air Quality Burning incense produces bank, which can worsen inner air quality, especially in inadequately voiced spaces. Dragged exposure to incense bank may irritate the respiratory system and be dangerous to individualities with respiratory conditions. Disinclinations and perceptivity some people may be sensitive or antipathetic to the spices and bank from incense, leading to discomfort, disinclinations, or respiratory issues. faves and creatures Some faves, particularly catcalls, may be sensitive to the bank and spices of incense, which can be dangerous to their respiratory dangerous. antipathetic conditions like dermatitis as Dhoop or incense enhances the threat factor for elevation of IgE in blood. However to have a clear picture farther study has to be conducted. Meanwhile while using incense or Dhoop, Ventilation of the room should be taken into consideration So that the unwanted effect of the incense or Dhoop can be Under control

CONCLUSION

- In the current research, herbal Dhoop was prepared from cow drug and medicinal plant.
- It can be evaluated for its efficacy in the air borne microorganism.
- Due to study of dhoopbatti we have observed good antimicrobial activity against air borne microorganism.
- This herbal dhoopbatti is prepared from easily available and profitable raw material. In India where most of function homa/havens start with lighting dhoopbatti.
- Dhoopbatti can be best option against the costly chemical products.
- Present work tries to conclude that if a focused approach is taken towards
 manufacturing of Dhoopbatti by using natural ingredients then it can be best potential in
 future.

ACKNOWLEDGMENTS

The authors would like to acknowledge the valuable thanks to the Principal Dharashive V.M. Sir, for providing all the facilities and their timely support, guidance and encouragement. Also, I would like to thanks to the guide and all the supporting faculties.

CONFLICT OF INTEREST

There is no conflict of interest.

REFERENCES

- 1. Amit Kumar, Vices Kumar Bhatia', Neel am Chauhan2 Herbal Droop prepared from products and herb submission, 24 sept 2020 published 30 oct 2020 et al.
- 2. Nikita Lad and Sachin Palekar Preparation and evaluation of Herbal Dhoop for cleansing the air cleaning and the Received: 15-09-2016 Accepted: 16-10-2016 et al.
- 3. Bhavna Sahu1, Shweta Dutta2*, Saraswati Prasad Mishra3, Satyendra Khute4, Lokesh Kumar5, Anshita Gupta Soni6, Kirti Dewangan7 brief review on dhoop and its Received 19-01-2021 Accepted 02-02-2021 Available online 05-07-2021.
- 4. Environment. https://www.ciriscience.org/a_269-Cleaning-and-the-Environment. 8 February, 2012 et al.
- 5. Yassin M, Almouqatea S. Assessment of airborne bacteria and fungi in an indoor and outdoor environment. International Journal of Environmental Science & technology et al.
- 6. Awosika S, Olajubu F, Amusa N. Microbiological Assessment of indoor air of a teaching hospital in Nigeria. Asian Pacific Journal of Tropical Biomedicine. 2012; et al.
- 7. The PlainEnglish Guide to the Clean Air Act; 2007. Available From: https://www.epa. gov/sites/production/files/2015 et al.
- 8. Yassin MF, Almouqatea S. Assessment of airborne bacteria and fungi in an indoor and outdoor environment. Int J Environ Sci Technol, 2010 et al.
- 9. Randhawa GK, Kullar JS. Bioremediation of Pharmaceuticals, Pesticides, and Petrochemicals with Gomeya/Cow Dung. Int Sch Res Notices, 2011. et al.
- 10. Mukherjee G, Ghosh S. Use of Cow Dung as Mosquito Repellant. In Res J Pharm Med Sci. 2020. et al.
- 11. Ranasinghe MS, Arambewela L, Samarasinghe S. Development of herbal mosquito J Pharm 2016; 7(9): formulations. Int Sci Res. 3643–51. doi:10.13140/RG.2.2.17857.25443.et al.
- 12. Roth The benefits of Dhoop sticks! 2018. M. Available from: https: //www.speakingtree.in/blog/the-benefits-of-dhoop-sticks.et al.
- 13. Imran M, Imran M, Khan S (2017). Antibacterial activity of Syzigium cumini leaf extracts against multidrug resistant pathogenic bacteria. Journal of Applied Pharmaceutical Science, 7(03): 168-174. et al.
- 14. Rajeswari S., Poongothai E., Hemalatha N. (2016). Antimicrobial Activities of Cow Dung Extracts against Human Pathogens. Int J Curr Pharm Res, 8: 4, 9-12. et al.
- 15. Ahuja A, Kumar P, Verma A, Tanwar R S (2012). Antimicrobial Activities of Cow Urine against Various Bacterial Strains. Int J Recent Adv Pharm Res, 2(2): 84-87. et al.

16. Ms Akanksha A. Dethe', Ms Pallavi J. Gaikawad', Ms Manasvi A. Dhokale, Mrs. Dipali S. Shelke A Review: "Preparation and Evaluation of Herbal Doop", December 2022; 2(2): et al.

www.wjpr.net Vol 13, Issue 4, 2024. ISO 9001:2015 Certified Journal 916