

# A Review: “Preparation and Evaluation of Herbal Doop”

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**Abstract:** Now a days people use various chemical containing product such as room freshners and disinfectants ,so with an aim to minimize the usage of chemicals or disinfectants to cleanse the environment ,effort were made to device an herbal dhoop using tulsi, bael, cowdung, cowmilk,clove,camphor which help to purify the air. The Anti microbial activity of the prepared dhoop was check and it was found that it can be potential source for disinfection in various places. It also show the mosquito repellent property. By performing dhoop , various airborne diseases may be prevent and the product been easily available in remote area leading to its sterilization. The current work focuses on preparation and evaluation of natural and herbal dhoop formulation for cleansing the environment..

**Keywords:** Anti-microbial herbs, Mosquito repellent, Cow dung, Tulsi

## I. INTRODUCTION

Various techniques are available in market for sterilization but Dhoop is prepared from herbal plant to minimise the hazardous effect.

With the help of various herbal plant or product we try to device a method to prepare herbal doobstick with various cow product and plant source.

It is prepared from extremely economical source and has a pleasant smell itself as an alternative to the usage of chemicals for disinfection.

Mosquito born disease create a major human health problem such as dengue, fever etc, therefore the herbal Dhoop is used for mosquitos repellent or have been used to resistance the growth of mosquitos.: Various ingredients like Tulsi, camphor,clove having the mosquitos repellent activity.

Bearing in mind the consequences of chemical substances and with an aim to cleanse the environment, an attempt was made to utilize herbal products to cleanse the air in a particular area and to create a positive atmosphere with the help of its appreciable fragrance.

## II. MATERIAL AND METHODS

NAME OF INGRIDENTS	SCIENTIFIC NAME	QUANTITY	CATEGORY
Bael	<i>Aegle marmelos</i>	10gm	Anti microbial
Tulsi	<i>Osmium sanctum</i>	10gm	Anti microbial/Anti-flu
Camphor	<i>Cinnamonumcamphora</i>	10gm	Biofuel/air purifier
Clove	<i>s.aromaticum</i>	10gm	Anti microbial
Cowdung	-	20gm	Biofuel
Cowmilk	-	q.s	Binder
Ghee	-	q.s	Binder
Myrrh	<i>Commiphora myrrh</i>	20gm	Perfume fixative
Marigold	<i>Tagetes erecta</i>	10gm	Perfuming agent

## III. METHOD OF PREPARATON

All the plant powder and cow dung were taken in a clean and dry motor pestle and grind finely. Then add the cow milk and cow ghee to the above mixture to form a wet mass. A plastic syringe was cut at apical side so as to open the mouth

of syringe completely .The syringe is filled with the wet mass and set for few minutes. Then pull the syringe and remove the dhoop stick from syringe. These dhoop stick are dried at 40\*c to get completely dry . After completely dry the dhoop stick were used for the evaluation of various activity.



**Figure:** Herbal Dhoop

**IV. EVALUATION OF HERBAL DHOOP**

**4.1 Result and Discussion**

1. Physical evaluation
2. Chemical evaluation
3. Sensory analysis
4. Anti microbial analysis
5. Mosquitos repellent activity

**A. Physical Evaluation**

SR. NO.	PARAMETERS	OBSERVATION
1.	Colour	Brownish
2.	Odour	Resinous

**B. Chemical Evaluation**

**Physicochemical Test**

SR. NO	TEST	OBSERVATION
1.	Carbohydrates	+
2.	Alkaloids	+
3.	Glycosides	-
4.	Triterpenoids and phytosteros	+
5.	Phenolic compounds and tannins	+
6.	Flavonoids	-
7.	Amino acids	-





**Figure:** Phytochemical test of Herbal Dhoop

### C. Sensory Analysis

A survey also carried out in order to evaluate the acceptability of herbal dhoop among 15 students. Various parameters such as smell, appearance ,smoke etc was evaluated:

SR NO.	QUESTION	YES	NO
1.	Is the smell appreciable?	12	03
2.	Smoke is irritating?	10	05
3.	Use of product at home?	15	00
4.	Will you recommend the product?	12	03
5.	Resionous product?	08	07

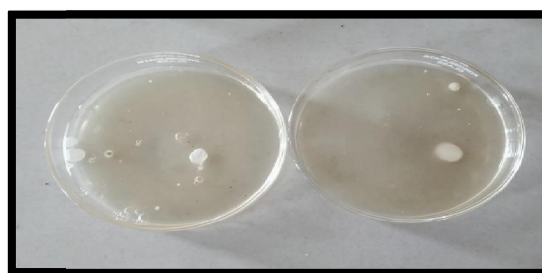
### D. Mosquitoes Repellant

To evaluate the dhoop stick against mosquitos repellent activity.The repellency activity bythe stick or dhoop to the mosquitoes shown successful result when burning in a corner of home having mosquitoes and it explain that natural insecticidal preparation are always effective than synthetic repellent. During the burning of dhoop it was shown that upto 80% of the mosquitoes number was reduced.The tulsi,camphor, clove show the maximum mosquito repellent activity.

### E. Microbiological Study

The evaluation of antimicrobial activity was carried out by preparing Nutrient Agar plates in duplicates set of plates exposed in same area. For performing this activity we take 2.8 gm of nutrient broath and 3gm of agar then pour into the 50 ml distilled water in conical flask. Then place the conical flask in autoclave .After sterilization the sample pour into petri plate and cover the sample and make them solidify. open the petri plate in the test area for 10 min and place in incubator for 24 hrs. After that open the second petri plate in same area where the dhoop is burn and place in incubator, then after 24 hrs check the difference between both plates.

#### 4.2 Observation



Before

After

### V. CONCLUSION

The of herbal dhoop was prepared and evaluated. The main aim of herbal dhoop formulation for cleansing the air or pleasant environment The above evidence that this dhoop can cleanse the air or environment and having the mosquitoes repellent activity. It can also help in creating a positive environment and can act as a room purifier. Natural and biocompatible measures like herbal dhoop can potential aid in internal environment cleansing and sustainable conservation without causing any harm to the environment unlike various chemicals and aerosols.

### ACKNOWLEDGEMENT

We thanks and gratitude to Trustee of Samarth Rural Educational Institute's and Samarth Institute of Pharmacy, Belhe with their valuable guidance and support.

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