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# Formulation and evaluation of herbal Toothpaste for Acacia Arabica

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### Abstract

Medicated herbal Toothpaste from the Arabica plant leaf and been prepared and evaluated . The formulation main aim is to prepare and evaluated the herbal Toothpaste from the Acacia Arabica plant leaves to treatment of the clean to the teeth. The aim of current research to formulate herbal Toothpaste utilizing plant extract like, Neem, leaves Guava leaves Cinnamon bark, other ingredients are champhor Honey.

The herbal Toothpaste formulated which can satisfy the clean the mouth fresh and prevent toothpaste decay by bacteria. The toothpaste was prepared by using various herbal ingredients which posses the antibacterial, antiseptic and cooling properties.

Clove, Ginger, Neem, Tulsi, and Acacia Arabica are the herbal ingredients used in the Toothpaste .The prepared toothpaste was evaluated the physical characteristics such as colour, odour, stability, taste

# **Key words**

Oral hygiene, Herbal ingredients, Neem, Tulsi, antibacterial effect, water

# Introduction

The oral hygiene is an important key to maintain good appearance impression of an individual and gives confidence. The Toothpaste of two parts crown and the root. Neem is one of the most widely researched tropical trees for the development therapeutic action. Dentrifrice can be used as prophylactic cosmetic for toothpaste to prevent tooth decay and bad breath . Toothpaste and Tooth Powder are based on its abrasive property.

The herbal dentritrifise are available in different formulation such as toothpaste, tooth powder, mouth wastes etc. Toothpaste is mainly composite of abrasive agents e.g Calcium phosphate, calcium carbonate, sodium lauryl sulphate. Other ingredients such as sweeting agents preservatives colour also used in the formulation, water is used in the Vehicle.

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### **Ideal Properties**

Good abrasive effect

Important no stain in tooth

Prolonged effect

Cheap and easilly available

### **Method and materials**

Herbal toothpaste was prepared using Clove, Tulsi, acacia banana calcium phosphate sodium lauryl sulfate neem leaf and fruit of clove process at the antibacterial activity Ginger give the antiseptic property and bad breath of mouth is prevented by Tulsi bunion is the used in against toothache sodium lauryl sulphate used in the forming agent akasher is used in selecting agent saccharin sodium acts as a sweetening agent.

### Collection

The following ingredients like Acacia, Neem, Clove and Tulsi are found in Aditya college Campus.

# 1) Neem



### Scientific name: Azadirachta indica

Family: Meliaceae

**Order:** Sapindales

Kingdom: Plantae

# **Uses & Effectiveness**

Insufficient Evidence to Rate Effectiveness for...

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# Dental plaque.

Early research suggests that applying neem leaf extract gel to the teeth and gums twice daily for 6 weeks might reduce plaque formation. It also might reduce the number of bacteria in the mouth that can cause plaque. However, using a mouth rinse containing neem extract for 2 weeks does not appear to reduce plaque or gingivitis.

# Insect repellant.

Early research suggests that applying extract of neem root or leaf to the skin helps repels black flies. Also, applying neem oil cream to the skin seems to protect against some types of mosquitos.

# Ulcers.

Some research suggests that taking 30-60 mg of neem bark extract twice daily by mouth for 10 weeks helps heal stomach and intestinal ulcers.

# Psoriasis.

Early research suggests that taking neem extract by mouth for 12 weeks, along with daily sun exposure and the application of a coal tar and salicylic acid cream, reduces the severity of psoriasis symptoms in people.

Fever.

Upset stomach.

2.Clove



Scientific name: Syzygium aromaticum Family: Myrtaceae Order: Myrtale Kingdom: Plantae

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# 2) Acacia



# Scientific name: Vachellia nilotica

Family: Fabaceae Order: Fabales Kingdom: Plantae

# 3.<mark>Tul</mark>si

Scientific name: Ocimum tenuiflorum Family: Lamiaceae Order: Lamiales Kingdom: Plantae





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# Procedure for preparation of toothpaste

- **1)** Take half the quantity of water tragacanth powder and heat it in a powder to get a gel.
- 2) To the remaining quantity of water add glycerine in sodium lauryl sulfate Preservative and makes it truly to get the clear solution.

3) Weigh the required quantity of security and calcium carbonate solution and mix it with the help of mortar and pestle.

4) To this powder and gum tragacanth and mix well.

5) Add glycerine preservative and sodium lauryl sulfate to eat and triturate uniformity to get a pestle.

6) Finally add flavouring agent and traturated will.

7) Transfer for narrow mouthed plastic tube seal and label.

# Formulation and evaluation

# Table (1)ParametersObservationsColourPinkOdourCharacteristicsTasteSweetStabilityStableAbrasiveGood abrasivePH7

# Table (2)

Common	Botanical	Parts	Category	Quantity	
Name	Name	used			
Neem	Azadracita	Leaves	Antibacterial	7.0	
	indica				
Clove	Eugenia	Fruits	Antibacterial	5.0	
	caryophllata				
Ginger	Zingiber	Root	Antiseptic	4.0	
	officinale				
Tulsi	Ocimum	Leaves	Prevents bad	3.0	
	sanctum		breath		
Calcium				5.0	
carbonate					
Acacia				3.0	
Sodium			Detergent	2.5	
lauryl					
sulphate					
Saccharin			Sweeting	1	
sodium			agents		
Wat <mark>er</mark>			Vehicle 🛛	0.5	
Honey			Sweeting	0.5	
			agents		
Awr <mark>ud</mark>		-	Anti-	0.5	
leav <mark>es</mark>			inflamma <mark>tory</mark>		
					2
				10	Nº T
Colour				<. \\	
				10	
Odor Tost					
Test					

Odor Test Stability PH Spreadability Abrasiveness

# 1. Colour

Prepaid toothpaste was evaluated for its colour the colour was checked visually

# 2. Odour

Odour was found by the smelling by the product

# 3. Taste

Test watch it manually by the testing the product

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# 4. Stability

The product stability is maintained the different temperature and place condition to check the stability.

# 5. PH

pH of formulated of the herbal toothpaste was determined by using the pH meter.

# **Result and conclusion**

The research concluded that Herbal toothpaste an emphasizing and more acceptable in detail research and they are safer with minimum side effects than synthetic preparation. Oral hygiene can be maintained in a reliable safe and inexpensive was by using herbal toothpaste.

The present formulation has good organoleptic spreading forming abrasive property and in vitro antimicrobial properties.

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