

Review on Formulation of Mouth Wash by Using Guava Leaves

Guide Name-Miss Pranjali P.Wable,
Students Name- HerambI Bonde, Madhura S.Pachpind, Saurabh V Rathod
Savitribai Phule

College Name- Siddhant College of Pharmacy, Sudumbre, Pune,Maharastra.

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ABSTRACT

Herbalmouthrinseandtoevaluateitseffectivenessagai
nstmicrobialloadoforalcavity.Theplant
substanceshadbeenaccruedandextractedforwatersol
ubleingredients.Preparedmouthrinsewas similarly
evaluated for its physicochemical homes
and antimicrobial activity. The current mouthrinse
possesses a properly antibacterial property. The
effects of stability learn about also confirm the
effectiveness of preparation. Present mouthrinse is
a liquid practise which typically incorporates
antibacterial and antiseptic agents. These solutions
can be used to minimize the microbial increase in
the oral cavity and may also also be given for other
reasonslikefortheir analgesic action,anti-
inflammatoryproperty or antifungal activity.
[keywords]:Mouth rinse,Antibacterial ,Mouth ulcer

I. INTRODUCTION:

Mouth wash, oral wash, or mouth bath is a
liquid which is held in the mouth passively around
the mouth by compression of the perioral muscles
and/or movement of the head, and may be
gargled,wheretheheadislistedbackandtheliquidgurgl
edatthereserveofthemouth.Mouth ulcer strategies
are time ingesting and bear provocation and skill to
be performed well; thus, antimicrobial dealers have
been employed vastly as an adjunct to mechanical
cleaning.

Severalantimicrobialchemicalagentssimila
raschlorhexidine,metronidazole.shopsandfactory's
isolates demonstrate goods that are vulnerable
enhancing, antiinflammatory. Guava leaves have
Antimicrobial, fungicidal, anti-inflammatory
property. Clove suggests analgesic and anti-
inflammatory property. Cinnamon has antioxidant
property, bactericidal and anti-inflammatory
property. It is mentioned to defend dental health
and freshens breath naturally.

The antibacterial and antimicrobial parcels
of the mouthrinse can help the smashof depression
inflicting bacteria, minimize ulcer, combat bad

health and save the enamel and healthy. Salt heals
mouthblistersbecauseofproducingexosmosisisimpro
vesblowngoodconditionsofmouthulcer. Saline has a
mechanical sanctification stir and an antiseptic
action.

1.1]Mouthulcer:

a] What is a mouth ulcer?

A mouth ulcer is a sore that develops in the soft
tissue lining of your expoies, lingo, inner cheeks,
lips or palate. They'reusuallyunheroicorred,andthey
can be relativelypainful. Mouth ulcers may also be
called canker blisters.

b] Symptomsofa mouth ulcer



Figno.1:Mouth Ulcer

Mouth ulcers are easy to spot. They are
generally appearasblisters on your lips, gums,
tongue, innercheeks or roof of the mouth. While
red around the edges, mouth ulcers are generally
white, unheroic or argentinein the center. You may
only develop one ulcer, or there might be more.
Other symptoms could include:

- Swellingaroundtheulcer.
- Increasedsorenesswhenbrushingyourteeth.
- Painthatworsenswheneatingspicy,saltyor

sour foods.

c] Causes mouth ulcers?

The exact cause of mouth ulcers is unknown. But there are several factors that can contribute to the development of these sores:

- Minor trauma or injury from dental work, similar to a sharp object or filling.
- Accidentally biting your tongue or cheek.
- Antiseptic response to certain bacteria.
- Wearing orthodontic braces or retainers.
- Vitamin deficiencies.
- Using harsh or abrasive toothpaste.

1.2] Mouthwash:

Mouthwash, oral wash, or mouth bath is a liquid which is held in the mouth passively or swirled around the mouth by compression of the perioral muscles and/or movement of the head, and may be gargled, where the head is tilted back and the liquid is gargled at the reverse of the mouth.

Usually mouthrinses are antiseptic results intended to reduce the microbial cargo in the mouth, although other mouthrinses might be given for other reasons similar to their analgesic, anti-inflammatory or antifungal action. Also, some rinses act as a saliva backup to neutralize acid and keep the mouth wet in xerostomia (dry mouth). Cosmetic mouthrinses temporarily control or reduce bad breath and leave the mouth with a pleasant taste.

a] Key Points:

- There are 2 main types of mouthrinses: first is cosmetic and second is therapeutic.
- Therapeutic mouthrinses are available both over the counter and by prescription, depending on the expression.
- There are remedial mouthrinses that help reduce or control gingivitis, gingivitis, bad breath, and tooth decay.
- Children younger than the age of six should not use mouthwash, unless directed by a dentist, because they may swallow quantities of the liquid inadvertently.
- A company earns the ADA Seal of Acceptance by furnishing scientific substantiation that demonstrates the safety and efficacy of its product, which the ADA Council on Scientific

affairs precisely evaluates according to objective conditions.

1.3] Guava leaves:

Due to the anti-ulcer, anti-microbial, anti-oxidant and healing properties, the *Psidium guajava* leaves can prove effective in the treatment of oral ulcers. Guava leaf contains methanol extract that is composed of volatile oil, flavonoid, and saponin which works against stomach ulcers and also promotes healing effect. Guava leaves also contain chemicals with antioxidant and other goods. It is not known how guava leaves work for medical conditions.

1.4] Guava in oral health:



Fig no.2 : Guava leaves

Guava leaves can be a great cost-effective traditional drug if you're having a hard time managing with dental infections. Its anti-bacterial conditioning against oral pathogens, dental caries, and dental plaque are remarkable.

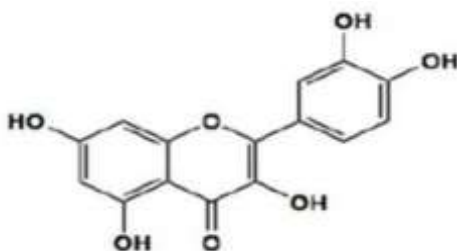
In India, in the state of Andhra Pradesh, it was documented to have used for mouth ulcers. Enquiries explain that the presence of flavonoids significantly decreases the size of mouth ulcers. In parts of Northeast India, young leaves and tender shoots of guava have been used for toothache. Traditional healers of Cameroon also used Guava leaves for treating dental infections. Guava young growths can also be used as 'chewing sticks' for taste and healing or mending.

1.5] Chemical ingredients of guava leaves:

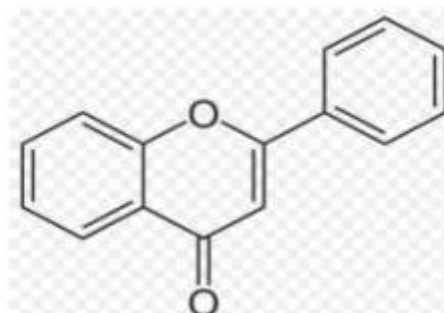
The leaves of the guava factory have been studied for their health benefits which are attributed to their plethora of phytochemicals, similar to quercetin, avicularin, apigenin, guajaverin, kaempferol, hyperin, myricetin, gallic acid, catechin, epicatechin, chlorogenic acid, flavonoid, epigallocatechin gallate, and caffeic acid.

Above from this ingredients flavonoid is beneficial to

eat mouth ulcer



Quercetin



flavonoids

2]Cinnamon:



Figno.3: Cinnamon

Synonyms: Cortex cinnamon, Ceylon cinnamon, Saigon cinnamon, Chinese cassia, Cinnamomum aromaticum, Cinnamomum laurus.

Natural Sources:

Cinnamon is the dried inner bark of the coppiced shoots of *Cinnamomum zeylanicum* Nees., belonging to the family Lauraceae.

Geographical Sources:

Cinnamomum zeylanicum is extensively cultivated in Ceylon, Java, Sumatra, West Indies, Brazil, Mauritius, Jamaica, and India.

Cultivation and Collection:

Cinnamon is cultivated by seed propagation system, about 4 to 5 seeds are placed in each hole at two meter distance between the plants. The tree grows stylish in nearly pure taking

only 1% of vegetable substance. It prefers shelter and constant rain of 75" to rainfall. Cinnamon is an ever-green tree grows from twenty to thirty feet high, has thick scabrous bark, strong branches. The packets are kept away from weeds and the plant is coppiced few inches above the ground, leaving five to six straight shoots on them. The bark is loosened and the longitudinal incisions are made using copper or brass knife. The barks are stripped off and made into bundles and wrapped in Coir.

The bundles are kept aside for about 2 hours to facilitate fermentation due to enzymatic action. The fermentation helps in the loosening of the outer layer up to pericycle. Each strip is taken and then they are scraped using a knife to separate the cork. The pieces are dried and they are categorized and packed one inside the other. Then compound quills are made by packing the small, quills into larger ones. They are cut into pieces of 1 m length and dried first under shade and later under sun.

During drying, the original pale colour changes to brown due to the presence of some polyphenols in the bark.

Characteristics : Cinnamon are more over in single- or double-emulsion quills, with a size of 1 meter length, 0.5 mm thickness, and 6 to 10 mm

periphery. The external surface has yellowish brown colour having longitudinal lines of pericyclic fibre and scars and holes representing the position of leaves or the side shoots. The inner surface is darker than the outer. Cinnamon has a fragrant insense; taste aromatic and sweet.

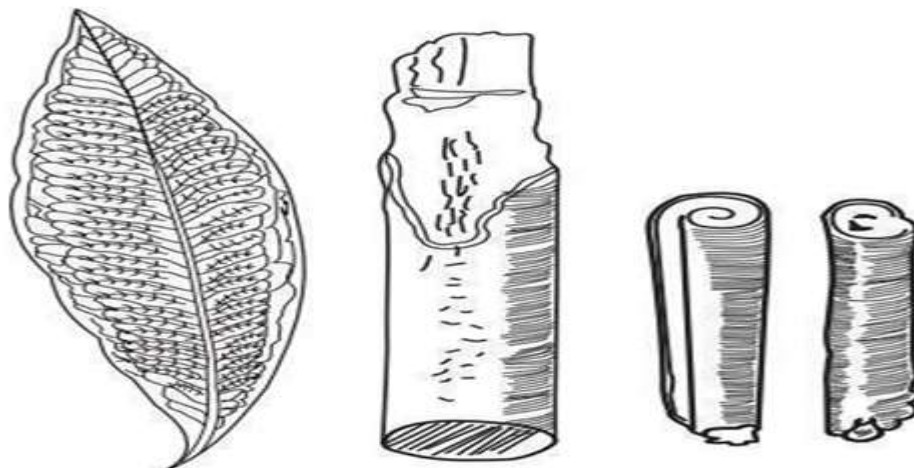


Fig no 4: Leaf and bark of Cinnamomum zeylanicum

Chemical Tests

1. A drop of volatile oil is dissolved in 5 ml of alcohol and a drop of ferric chloride is added, a pale green colour is produced. Cinnamaldehyde gives brown colour with ferric chloride, whereas eugenol gives blue colour.
2. The alcoholic extract is treated with phenylhydrazine hydrochloride, it produces red colour due to the conformation of phenylhydrazone of cinnamic aldehyde.

Uses:

It's used as an alterative, sweet, carminative, flavouring agent, antiseptic, antirheumatic, antispasmodic, demulcent, digestive, expectorant, stomachic, diaphoretic, antibacterial, antifungal, etc. It stops vomiting, relieves flatulence and is given

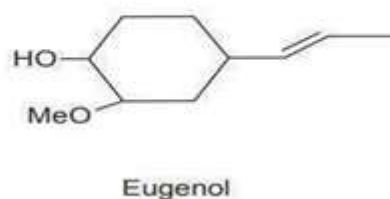
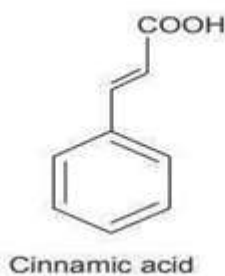
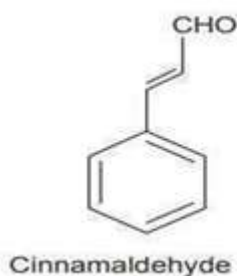
with chalk and as astringents for diarrhoea and haemorrhage of the womb. It is also used in the treatment of bronchitis, colds, palpitations, nausea, congestion, and liver problems.

Other Species:

Cinnamon cassia is frequently used as a substitute. *C. culiawanis* native of Amboyna and the bark has the flavour of clove, *C. iners*, Cassia burmarin, Saigon cinnamon, and *C. nitidum* are also used.

Chemical Constituents:

Cinnamon contains about 10% of volatile oil, tannin, gum, calcium oxalate and sugar. Volatile oil contains 50 to 65% cinnamaldehyde, along with 5 to 10% eugenol, terpenhydrocarbons and small quantities of ketones and alcohols.



3.CLOVE :

Synonyms: Clovebuds, Clove flowers.

Natural Source: Clove consists of the dried flower buds of *Eugenia caryophyllus* Thunberg, belonging to family Myrtaceae.

Geographical Source : clove tree is a native of Indonesia . It is cultivated substantially in Island of Zanzibar , Pemba, Brazil, Amboiana, and Sumatra. It is also set up in Madagascar, Penang, Mauritius, West Indies, India, and Ceylon.



Cultivation and Collection

Clove trees are evergreen and 10 meters to 20 meters in height. The plant requires a wet, warm and moderate climate with well-distributed rainfall. It is propagated by means of seeds. These seeds are sown in well-drained suitable soil at a distance of about 25 centimeters. The plants should be defended against pests and plant diseases. Originally it has to be defended from sunlight by growing inside a greenhouse or by constructing frames about 1 meter high and covering them with banana leaves. As the banana leaves decay gradually further and more sunlight falls on the young seedlings and these seeds are able to bear full sunlight when they are about 9 months old. The seedlings when they become 1 m high, they are transplanted into open spaces at a distance of 6 m just before the rainy season. The young clove trees are protected from sun even for a longer period by planting banana trees in between. The drug can be collected every year starting from 6 years old till they are 70 years old.

Clove buds change the colour as they develop. At the launch of the stormy season long greenish buds appear to change to a lovely rose peach colour and as the corolla fades the calyx turns yellow and then red. The buds are collected during dry weather in the month of August to December. The collection is done either by climbing on the tree or by using some ladders or with the help of mobile platforms. In some places the trees are indeed beaten using bamboo sticks for the collection of the bud. The medicines which are collected are then separated from the stalks and then placed on coconut mats for drying under sun. The buds lose about 70% of its

weight, whereas drying and change their colour to dark reddish-brown. The dried clove is graded and packed.

Characteristics:-

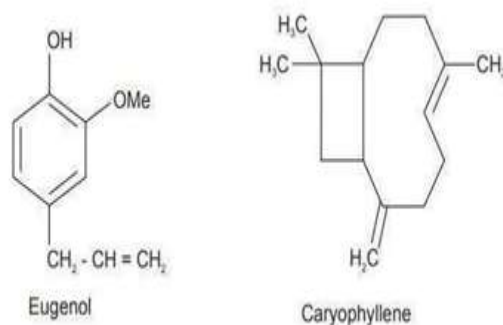
Clove is reddish-brown in colour, with an upper crown and a hypanthium. The hypanthium is sub-cylindrical and tapering at the end. The hypanthium is 10 to 13 mm long, 4 mm wide, and 2 mm thick and has schizolysigenous oil glands and an ovary which is bilocular. The crown region consists of the calyx, corolla, style and stamens. Calyx has four thick sepals. Corolla is also known as head, crown or cap; it is dome-shaped and has four pale yellow coloured petals which are imbricate, immature, and membranous. The ovary consists of abundant ovules. Clove has strong spicy, aromatic odour, and pungent and sweet taste.

Chemical Tests:-

- To a thick section through the hypanthium of clove add 50% potassium hydroxide solution; it produces needle-shaped crystals of potassium eugenate
- A drop of clove oil is dissolved in 5 ml alcohol and a drop of ferric chloride solution is added; due to the phenolic OH group of eugenol, a blue colour is seen.

Chemical Constituents:

Clove contains 14–21% of volatile oil. The other ingredients present are the eugenol, acetylene, gallic acid, and two crystalline principles; α - and β -caryophyllenes, methyl furfural, gum, resin, and fibre. Caryophyllin is odourless component and appears to be a phytosterol, whereas eugenol is a colourless liquid. Clove oil has 60–90% eugenol, which is the cause of its anesthetic and antiseptic properties.



4. LIQUORICE



Fig no.6: Licorice

Synonyms: Radix Glycyrrhizae, Sweet licorice.

Biological Source : Licorice consists of subterranean peeled and unpeeled stolons, roots and subterranean stems of *Glycyrrhiza glabra* Linn, and other species of *Glycyrrhiza*, belonging to family Leguminosae.

Geographical Source : It is mainly found in China, Europe, India, Iraq, Japan, Kurdistan, Spain, Turkey, and the United States.

Cultivation and Collection:

Licorice is often cultivated for its edible root which is widely used in medicine and as a flavouring. The plant requires a deep well cultivated fertile moisture-retentive soil for good root production. Prefers a sandy soil with abundant moisture and does not flourish in clay. Slightly alkaline conditions produce the best plants. The plant thrives in a maritime climate. It is propagated using seeds and roots. These seeds are presoaked for 24 hours in warm water and then sown in spring or autumn in a greenhouse. The seedlings are individually potted when they are large enough to handle, and grown there for their first winter in a greenhouse. They are transplanted in late spring or early summer when in active growth. Plants are rather slow to grow from seed. The plant parts are procured from old plantations, being waste from the harvesting process, consisting of those side roots or runners which have eyes or buds, cut into sections about 6 inches long. They are dibbled in rows 3 or 4 feet apart, about 4 inches underneath the surface and about 18 inches apart in the rows. In the autumn, the ground is dressed with farmyard manure, about 40 tons to the acre. Plants are slow to settle in and do not produce much growth in their first two years after being moved. The young

growth is also very susceptible to damage by slugs and so the plant will require some protection for its first few years. This species has a symbiotic relationship with certain soil bacteria; these bacteria form nodules on the roots and fix atmospheric nitrogen. Some of this nitrogen is utilized by the growing plant but some can also be used by other plants growing nearby.

Harvesting generally occurs in the autumn of the fourth year. The soil is carefully removed from the space between the rows to a depth of 2 or 3 feet as required, thus exposing the roots and rhizomes at the side, the whole being then removed bodily.

The earth from the next space is then removed and thrown into the trench thus formed and these operations are repeated continuously. Every portion of the subterranean part of the plant is carefully saved; the drug consists of both runners and roots, the former constituting the major part. The roots are properly washed, trimmed

and sorted, and either sold in their entire state or cut into short lengths and dried. In the latter case the cortical layer being sometimes removed by scraping. The older or 'hard' runners are sorted out and sold separately; the young, called 'soft,' are reserved for propagation.

Characteristics:

Licorice root is in long, straight, nearly circular, unpeeled fragments, several feet in length, varying in consistency from 1/4 inch to about 1 inch, longitudinally wrinkled, externally greyish brown to darkish brown, warty; internally tawny yellow; pliable, tough; texture coarsely fibrous; bark rather thick; wood porous, but dense, in narrow wedges; taste sweet, very slightly acid. The underground stem which is frequently present has an analogous appearance, but contains thin pith. When skinned, the fractions of root (including runners) are shorter, a pale yellow, slightly branched fibrous externally, and exhibit no trace of the small dark buds caught on the unpeeled runners here and there. differently it resembles the unpeeled.

Chemical Test :

When 80% sulphuric acid is added to a section or powder of the medicine, orange yellow colour is delivered due to conversion of flavone glycoside into chalcone glycoside isoliquiritin.

Uses:

Liquorice is broadly used as a sweetening agent and in bronchial problems such as catarrh, bronchitis, cold, flu and coughs. It reduces irritation of the throat and yet has an expectorant result. It produces its demulcent and expectorant effects. It is employed in relieving stress. It is a strong recovery agent for tuberculosis, where its good outcomes have been compared to hydrocortisone.

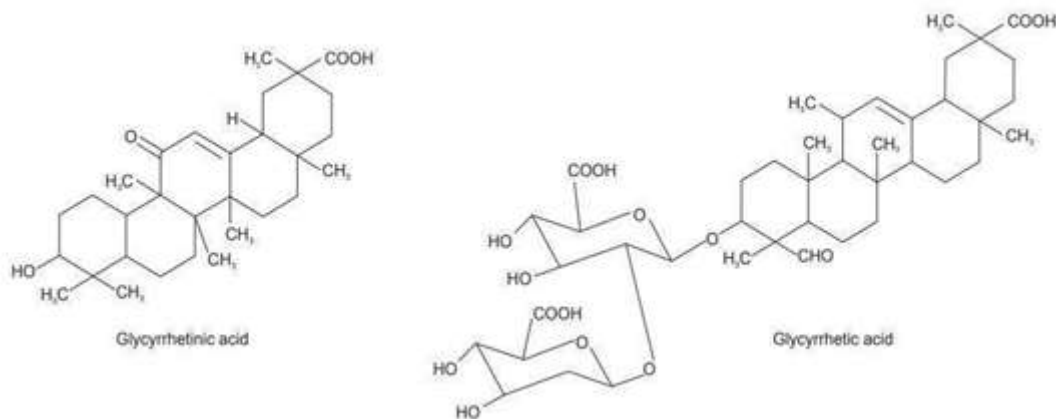
Liquorice is also effective in helping to reduce complications and it may have an antibacterial action as well. It is used in the treatment of chronic inflammations similar as arthritis and rheumatic conditions, chronic skin conditions, and autoimmune conditions in general. It should be used in moderation and shouldn't be prescribed for pregnant women or people with high blood pressure, kidney problems or taking digoxin-based medication. Prolonged use raises the blood pressure and causes water retention.

sure and causes water retention.

Chemical Constituents:

The principle element of liquorice root is Glycyrrhizin (6–8%), accessible in the form of a sweet, which is 50 times sweeter than sucrose, white crystalline powder, consisting of the calcium and potassium salts of glycyrrhizic acid. Glycyrrhizic acid on hydrolysis yields glycyrrhetic or glycyrrhetic acid.

Glycyrrhizic acid is a triterpenoid saponin having α -amyrin structure. It shows especially in alkaline solution salivating but it has very weak haemolytic property. The unheroic colour of the medicine is due to chalcone glycoside isoliquiritin. The medicine also contains sugar, starch (29%), gum, protein, fat (0.8%), resin, asparagin (2–4%), a trace of tannin in the outer bark of the root, yellow colouring matter, and 0.03% of volatile oil.



5) METHOD OF EXTRACTION

5.1] Guava leaves:

The leaves of guava were washed under running tap water to remove dust and shade dried at room temperature for 3-4 weeks. The dried plant parts were reduced to coarse powder with a mechanical grinder and passed through a 40 no. mesh sieve. The powder was then subjected to extraction by cold maceration using alcohol,

hydroalcohol (alcohol + water) and water to attend their respective extracts. Both 10 g of dried guava leaves powder were soaked in 50 ml of alcohol, hydroalcohol and water in separate conical flasks for 24 hours at room temperature, under occasional shaking. After 24 hours, the mixture was filtered out using a simple filtration system and the filtrates were collected in separate vessels.



Figno.7:Freshleaves



Figno.8:Driedleaves



Fig no.9: leaves powder in water



Figno.10:leavespowderin hydroalcohol

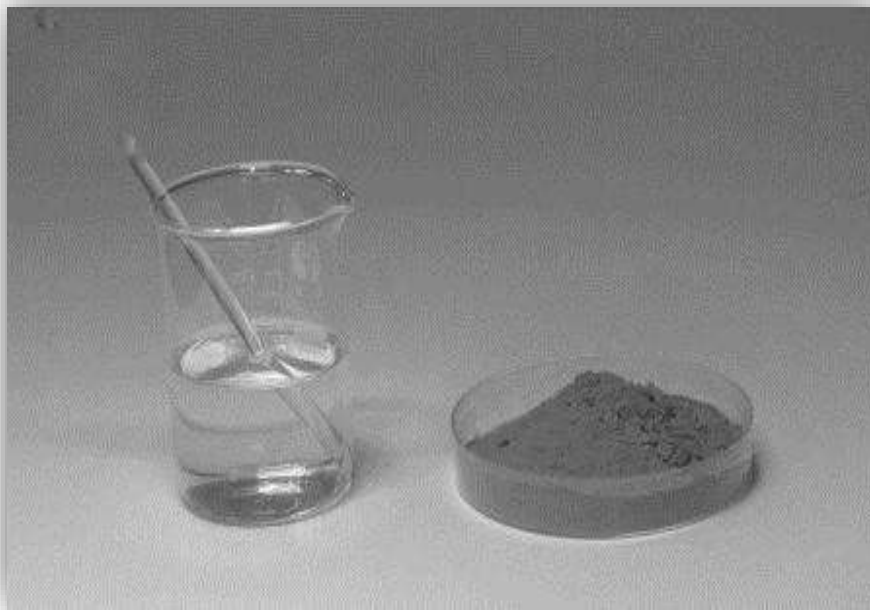


Figno11:leavespowderinalcohol

5.2]Cinnamon,Clove,Liquorice:

Buds of *Eugenia caryophyllus* (clove), dingly of *Cinnamomum zeylanicum* (cinnamon), and root *Glycyrrhiza glabra* (Liquorice) were aimlessly collected from mature plants. The collected plant accoutrements were washed with sterile water, shadow dried, destroyed and stored in air-tight bottles indepently. The waterless extract of

each plant stuffwas prepared by soaking the powdered plant regions in sterile distilled water and maintained in Incubator at 37°Celcius for 72 hours. The herbalextracts werescreened using Whatmann filterpa per; marc was washed with 10 ml of sterile distilled water and pressed.



Figno.13:clovepowderinwater



Figno.14:liquoricepowderinwater

6] Formulation of herbal Mouthrinse:

The herbal Mouthrinse was prepared by the following ingredients given in table 1. Salt solution was made by

preparing 1% w/v solution of salt in sterile water. Then all the extracted ingredients are mixed in a fixed rate.

Sr.no	Ingredients	Botanical name	Plantpart	Functions	Percentage
1	Guava leaves	Psidium guajava L.	Leaves	Antimicrobial	30%
2	Clove	Eugenia caryophyllus	Flower bud	Analgesic, anti-inflammatory	30%
3	cinnamon	Cinnamomum zeylanicum	Bark	Flavouring agent, bactericidal	20%
4	Liquorice	Glycyrrhiza glabra	Root	Demulscient, sweetner	10%
5	Salt	-	-	Osmolytic preservative	10%
6	Sodium benzoate	-	-	Preservative	0.2%

Tableno.1:Formulation of herbal mouthwash

7] Evaluation parameter:

- 7.1 : Colour and Odour: Physical parameters like odour and colour were examined by visual examination .
- 7.2 : pH : pH of set herbal mouthrinse was measured by using digital pH meter. The pH meter was calibrated using standard buffer solution about 1ml of mouthrinse was weighed and dissolved in 50ml of distilled water and its pH was measured .
- 7.3 : Test for microbial growth in formulated mouthrinse - The formulated mouthrinse was inoculated in the plates of agar media by pouring plate method and a control was prepared. The plates were placed in the incubator and are incubated at 37°C for 24 hours. After the incubation period plates were taken out and checked for microbial growth by comparing it with the control.
- 7.4 : Stability Studies- The formulation and preparation of any pharmaceutical product is incomplete without proper stability studies of the prepared product. This is done in order to determine the physical and chemical stability of the prepared product and thus determine the safety of the product. A general method for predicting the stability of any product is accelerated stability studies, where the product is subjected to elevated temperatures as per the ICH guidelines. The

samples were stored at under the following conditions of temperature as 3-5°C, 25°C, 40°C. Eventually the samples kept under accelerated study were withdrawn on daily intervals and were analyzed.

7.5 : In vitro antibacterial activity: In vitro antibacterial activity was performed on isolated colonies of *Streptococcus mutans*. The Agar well diffusion technique was used for determining the zone of inhibition and minimum inhibitory concentrations (MIC). The strains of *S. mutans* were inoculated in a refabricated blood agar plate. Plates were dried and 4 wells were made with the help of 6 mm agar well knife.

II. RESULT:

- 1] colour of the formulation is brown and odour is pleasant.
- 2] pH of the components used to be determined to be 6.1. As the pores and skin is having an acidic pH around 5.5 this pH range of the formulation is appropriate for mouth ulcer.
- 3] The formulation was once discovered to be free from microbes. The system used to be free from microbes as they have no longer produced any microbial increase when they acquired inoculated in the agar medium
- 8.4] Stability study:

TEMPERATURE	EVALUATION PARAMETERS	0	1	2	3
3-5°C	Visual appearance	Light brown	Light brown	Light brown	Light brown
	Phase separation	Nil	Nil	Nil	Nil
	homogeneity	Good	Good	Good	Good
Room temperature (25°C)	Visual appearance	Light brown	Light brown	Light brown	Light brown
	Phase separation	Nil	Nil	Nil	Nil
	homogeneity	Good	Good	Good	Good
40°C	Visual appearance	Light brown	Light brown	Light brown	Light brown
	Phase separation	Nil	Nil	Nil	Nil
	homogeneity	Good	Good	Good	Good

Table 2. Results of stability of herbal mouthrinse

8.5] Mouthrinse antimicrobial ingredient like guava leaves, clove and different necessary plant extracts have been found to reduce mouth ulcer when combined with daily rinsing. The antibacterial activity was evaluated by agar diffusion method for different concentrations of mouthrinse

III. CONCLUSION:

The natural remedies are more acceptable because it is believed that they are safer with lesser side effect than the synthetic medicines. The study demonstrated that the natural herbs employed in the present formulation can avoid problems with oral health. Numerous studies have shown that these herbs have long history of being used successfully. The formulation is confirmed to be acceptable with a pleasant odour better after effect from the result of physicochemical examination. The zone of inhibition result further demonstrated the effectiveness of the mouthrinse, which the patients favoured for its taste, ease of use, and test duration in the mouth after rinsing. Use this mouthrinse, a person can conveniently clean his mouth and maintain oral health. However these study was short duration study so long term study is required.

2nd Procedure For Guava Mouthwash:-

Aim:- To Prepare Mouthwash Using Guava Leaves
Requirements:-

Apparatus:-

Spatula, burner, beaker, tripod stand, etc
Chemicals:-
Preservatives, filtered water

Herbal Ingredients:- Guava Leaves, (FRESH), salt or baking soda, peppermint oil, etc
Theory:-

Most of us will at some point in our lives have a toothache which is painful

aliment. When one consumes or drinks something that is exceedingly cold or hot or sour the agency get worse. Although there are many painkillers for the toothache but natural pain relief medicines are mostly preferable. This is due to the fact because natural therapies are safer, more accessible compatibly more effective.

Guava leaves one such widely used natural toothache treatment. Guava leaves are the potent natural remedy for treating tooth pain throughout the bacterial infection and poor dental hygiene. This leaves are fantastic toothache cure because they are rich in

flavonoids, which have antibacterial and anti-inflammatory effects. Fresh guava leaves are frequently used to treat mouth sores and ease toothache due to their strong anti-

inflammatory properties.

HOW TO TREAT TOOTHACHE WITH GUAVA LEAVES?

PROCEDURE

1. Pluck the fresh and clean (NEW OR BUDDING) leaves of guava tree.
2. Take a mortar and pestle and crush the leaves and allow the juice to come.
3. Transfer the juice/extract in a beaker and add water (filtered) into it.
4. Add salt/baking soda in the container.
5. Shake it thoroughly allow it to settle.
6. Add preservatives. (Optional:- But can add clove oil, peppermint oil as a flavor)
7. Transfer it in a bottle and use it.

USES

1. Guava leaves have anti-ulcer properties.
2. Anti-inflammatory properties.
3. Guava leaves contain high vitamins like B3 and B6 also known as niacin and pyridoxine. Helps in improving blood circulation to brain.
4. Used as a painkiller in toothache.
5. By consuming guava leaves it prevents the skin-aging.
6. Also used as skin toner.
7. Helps in loose fats.
8. Guava leaves can prevent the event of food poisoning, vomiting and nausea as well.

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Link for procedure of guava mouthwash

1. <https://youtu.be/Do3GvZq8CHg?si=HFrijzFkY6QEvLqD5>
2. <https://youtu.be/YELgipDQ0EI?si=UP2e50MNz2oK4ICY>
3. <https://youtu.be/XAkXf7iUqWE?si=zGPOuqDI6J2l0tuj>
4. https://youtu.be/WCVE2hYSstA?si=goDm9sQi3_o2D2dW
5. <https://youtu.be/qQ-Xt2idzco?si=wysiUICYtyT62gbj>