

Formulation and Evaluation of Herbal Mouthwash

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Abstract—Herbal mouthwash is another type of mouthwash which is prepared from the herbs extract. Herbal mouthwash has major advantage over the chemically prepared mouthwash due to their non-irritating and non-staining properties and have not alcohol content. In the herbal mouthwash the herbs extract is obtained from the leaves, fruit, flower, bark, and root of various plant. The natural content has minimal or no side effect and have less harmful effect. Various naturally and commonly available substances like salt, alum, vinegar, olive oil etc were used. The mouthwash is a chemotherapeutic agent which are used as an effective home care by patient to enhance oral hygiene

Keywords: Herbal, Mouthwash, Antimicrobial, Natural Extracts, Hygiene

I. INTRODUCTION

The meaning of MOUTHWASH is a usually antiseptic liquid preparation for cleaning the mouth and teeth or freshening the breath. Mouthwashes are often prescribed in dentistry for prevention and treatment of several oral conditions. In the recent times the use of naturally occurring products what is otherwise known as grandmothers remedy are used on a large scale. This has now called for a newer age of mouth washes but is the new age mouth washes at par with the gold standard or even better than them this study investigates. Spices as clove, oregano, mint, they me and cinnamon, have been employed for centuries as food preservative Delight college of pharmacy Koregaon Bhimas and as medicinal plants mainly due to its antioxidant and antimicrobial

activities. Nowadays, many reports confirm the antibacterial, antifungal, antiviral and anticarcinogenic properties of spice plants

II. OBJECTIVE

1. To develop a natural herbal mouthwash using plant extracts with known medicinal properties.
2. To evaluate the antimicrobial efficacy of the herbal formulation against common oral pathogens.
3. To ensure the mouthwash is safe and non-toxic for oral use.
4. To reduce bad breath, plaque formation, and gingival inflammation through regular use.
5. To provide an alternative to synthetic mouthwashes, minimizing side effects such as staining, burning sensation, or altered taste.
6. To assess the stability and shelf-life of the herbal formulation.
7. To promote oral hygiene using eco-friendly and sustainable ingredients

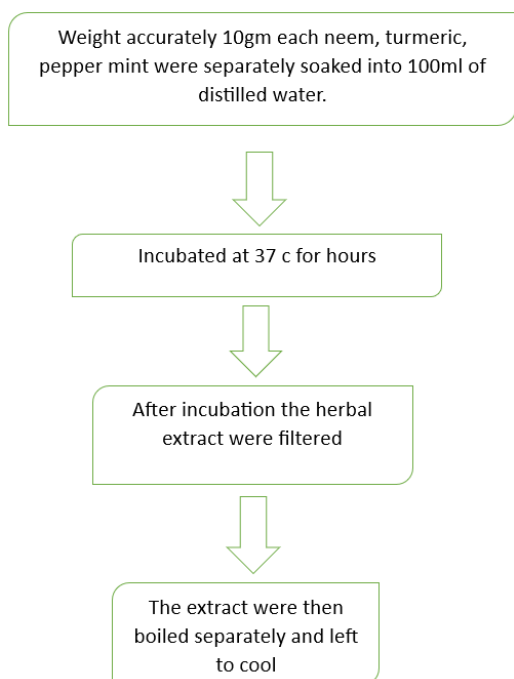
Need

1. Maintains oral hygiene: Helps remove food particles and reduces bacterial load in the mouth.
2. Freshens breaths: Provides a quick and easy way to combat bad breath (halitosis).
3. Reduces plaque and tartar: Aids in preventing buildup that leads to gum disease and cavities.
4. Prevents and soothes gum problems: Can reduce inflammation, bleeding, and risk of gingivitis.
5. Supports overall dental care: Complements brushing and flossing for a more complete oral care routine.

Ingredients used in Herbal Mouthwash

Sr.No	Name of Ingredient	Image	Chemical Constituent	Uses
1	Peppermint		methyl acetate, Menthol, menthone, cineol,	anti-inflammatory, anti-bacterial, Freshening agent
2	Liquorice		sweeter than sucrose, white crystalline powder, consisting of the calcium	Treat bacterial and viral infection, Digestive problem
3	Vinca		vincristine and vinblastine	treat diabetes, oral hygiene purpose
4	Clove		eugenol, eugenyl acetate, caryophyllene	anti-microbial, analgesic, dental care, freshening

III. METHODOLOGY



Formulation TRIAL 1



Observation: In this formulation, we observed that in first trial the foam is not produced, so we added Sodium lauryl sulfate (SLS) as a foaming agent in sufficient quantity.

Trail 2:

In second formulation, we observed that the mouthwash taste is very bitter due to excessive amount of neem extract



Trail 3:



Observation:

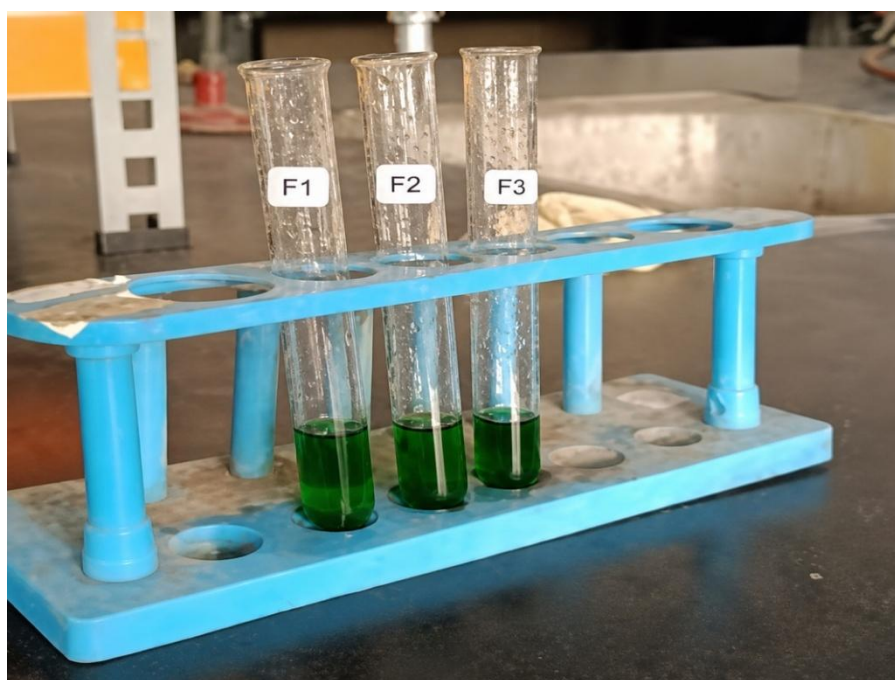
In final, we observed that mouthwash is perfectly ready and it produce cooling in mouth and reduced harmful bacteria in oral cavity.

IV. RESULTS

Sr no.	EVALUATION PARAMETER	RESULT
1	Colour	Green
2	Odour	wood clove
3	pH	6.1
4	Appearance	Visual Appearance
5	Texture	Liquid
6	Flavour	Tingly, spicy flavour similar to cinnamon
7	Taste	Strong, warm, and spicy taste.
8	Viscosity	1.50 to 3.00 cP

Evaluation of prepared Mouthwash

Mouthwash formulation	Evaluation Parameter	Observation
F1	Visual Appearance Phase Separation Homogeneity	Green No phase separation Good
F2	Visual Appearance Phase Separation Homogeneity	Green No phase separation Good
F3	Visual Appearance Phase Separation Homogeneity	Green No phase separation Good



V. SUMMARY AND CONCLUSION

Polyherbal Mouthwash Formulation Study

- Combines active constituents of neem, Tulsi, Liquorice, cinnamon, mint turmeric, and clove extracts for an effective, alcohol-free mouthwash.
- Results show potent plaque inhibitory activity.
- Patients prefer the taste, convenience, and test duration of the mouthwash.
- Can be used as an adjunct to mechanical therapy for treating plaque-induced gingivitis.
- Aims to create an effective, inexpensive herbal oral health intervention for low social economic communities.
- Short-term study requires larger, longer-term studies.
- Natural herbs proven to prevent oral hygiene issues and bad breath.
- Helps individuals rinse their mouth easily, preventing various oral health Issues.

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