



Formulation and Evaluation of Herbal Mouth Wash

¹Sachin S Sapkal, ²Piyush N Jangam

¹Student, ²Professor

¹Arihant College of Pharmacy, Kedgaon, Ahilyanagar, Maharashtra, India, 414005.

ABSTRACT:

Herbal mouthwashes are made from natural plant ingredients. People prefer them over chemical mouthwashes because they don't cause irritation, don't stain teeth, and don't contain alcohol. The natural ingredients come from plant leaves, fruits, seeds, and tree oils. Herbal mouthwashes usually have little to no side effects and are safer to use. They are made using plant extracts and essential oils that have helpful compounds like catechins, tannins, and sterols. Herbal mouthwash helps keep the mouth clean, reduces plaque on teeth, helps with gum problems, and kills harmful bacteria in the mouth.

Keywords: Herbal mouthwash, natural extracts, plaque maintenance.

Introduction :

Oral health is becoming a big concern around the world. A 2003 world health report said that taking care of your mouth is an important part of staying healthy overall. Most chemical oral care products have antiseptics that help control plaque. These products come in many forms like toothpaste, mouthwash, sprays, gum, and varnishes. Among these, mouthwash is one of the most commonly used after toothpaste. Mouthwash is a liquid antiseptic used to reduce germs in the mouth. It helps clean the mouth, remove bad breath, and fight infections. Mouthwash is also helpful for people with gum problems like gingivitis, and it kills harmful bacteria. Many dental patients use it to treat a sore mouth, throat ulcers, or sensitive teeth. Dentists also use it before oral surgeries to clean and disinfect the area, reducing the risk of infection. Some mouthwashes have fluoride, which can help prevent tooth decay. But it's important not to use mouthwash right after brushing, because it can wash away the fluoride from the toothpaste. It's better to use it at a different time, like after meals.

Using mouthwash with brushing is more effective than brushing alone. While brushing helps remove plaque, mouthwash can kill bacteria in hard-to-reach places like between teeth and around the mouth.

Mouthwashes usually have anti-inflammatory, antimicrobial, and pain-relieving properties. There are two main types of mouthwash: chemical and herbal. Mouthwash can contain alcohol, glycerin, sweeteners, foaming agents, flavors, and colors. It can be used just to freshen breath or to treat serious problems, such as mouth infections in patients who are very sick (like those getting bone marrow transplants).

Drug profile :

A] Tulsi -

Synonyms: Vishnupriya, Haripriya

Botanical Name: *Ocimum tenuiflorum* L.

Kingdom: Plantae

Family: Lamiaceae (Mint family)

Genus: *Ocimum*

Species: *Ocimum tenuiflorum* (also known as *Ocimum sanctum*)

Biological Source: Tulsi consists of the dried leaves and flowering tops of the plant *Ocimum tenuiflorum* (syn. *Ocimum sanctum*) Linn.



Fig 1 – Tulsi

B] Peppermint Oil–

Synonyms: Mentha oil, Peppermint essential oil, Pudina oil

Botanical Name: *Mentha piperita* L.

Kingdom: Plantae

Family: Lamiaceae (Mint family)

Genus: *Mentha*

Species: *Mentha piperita* (a hybrid of *Mentha aquatica* and *Mentha spicata*)

Biological Source: Peppermint oil is the volatile oil obtained by steam distillation of the fresh flowering tops or leaves of *Mentha × piperita* L.



Fig 2 – Peppermint Oil

Experimental method -

1. Wash the Tulsi leaves thoroughly in clean water.
2. Boil the water in a pot, add Tulsi leaves (and clove if using).
3. Let it simmer for 5–7 minutes until the water reduces slightly and turns greenish.
4. Turn off the heat and let it cool completely.
5. Strain the mixture using a fine sieve or cloth.
6. Add salt if desired and stir until dissolved.
7. Store in a clean, airtight bottle. Refrigerate for up to 5–7 days.

Formula Table -

Sr no	Ingredients	Quantity(ml)
1.	<i>Ocimum tenuiflorum</i> L.	20
2.	<i>Mentha × piperita</i> L.	1

3.	Salt	5g
4.	Distilled water	qs

Table 1 – Formula Table

Evaluation of herbal mouth wash :

- 1.Colour: the colour of the mouth wash was visually analyzed.
2. Odour: the formulation was evaluated for its odor by smelling it.
3. Consistency: it was determined manually.
4. pH: 1ml of sample of herbal mouth wash was taken and dissolved it into 50 ml distilled water. The ph of solution was taken in previously standardized digital ph meter.

Result :

Sr.no.	Parameters	Observation
1	Colour	Green
2	Odour	Pleasant
3	Consistency	Slitely Viscus
4	Ph	6.5

Table 2 – Evaluation results

Conclusion :

A lot of soaps and hand wash are in the market cosmetics are widely used. Now a days people prefer organic product eatier a number of herbs and roots were used in Ayurveda herbs and roots are main contain. The experiment that were conducted and the findings were it gives anti-bacterial, anti- microbial, anti-inflammatory, anti saptic and would clean all the aspects.

Final formulated mouthwash :

Fig 5 – Formulated Mouthwash

Acknowledgement :

I would also thankful to my mentor Mr Piyush N Jangam of Arihant College of Pharmacy, Kedgaon, Ahilyanagar whose valuable guidance and kind supervision given to me throughout the course which shaped the present work as its show. You are wonderful mentor. I will always be grateful to you for your support and kindness. It would be impossible to count all the ways that you have helped me in my career. Thanks for being a good mentor and for guide me on right Path.

REFERENCES :

- [1] Shivani B. Shambharkar and Vinod M. Thakare.2021, Formulation and Evaluation of Herbal: Mouthwash Research Article, World Journal of Pharmaceutical Research; 10(9): 775-791.
- [2] P. P. Sharma.2001. Cosmetics Formulation manufacturing quality control, Vandana publication; 128, 107, 135, 527-530
- [3] S. C. Bhatia.2001. Perfumes, soaps, detergents and cosmetics, CBS; Volume II, 609-611
- [4] Sarfaraz K. Niazi, Handbook of Pharmaceutical manufacturing formulations (Liquid Products), Informa healthcare, volume 3, special edition, 5-7
- [5] Sanju Nanda, Arun Nanda, Roop K Khar.2011. Cosmetic Technology, Birla, 462-470
- [6] Bruno Burlando, Luisella Verotta, Laura cornara and Elisa Bottini Massa, Herbal Principles in Cosmetics, CRC press, 176-179
- [7] Saket A. Deshmukh, Yogesh N. Gholse, Rahul H. Kasliwal and Dinesh R. Chaple.2019. Formulation, Development, Evaluation and Optimization of Herbal Antibacterial Mouthwash: Research Article, World Journal of Pharmaceutical Research; 8(6): 828-841.
- [8] Suchita Gokhale, Raj M Pitambare, Priyam S. Pawar , Ashwini H. Pawshe, Srushti P. Patil.2020. Formulation Development and Evaluation of Herbal Mouthwash: Research Article, American Journal of Pharmtech Research; 10(4).
- [9] Priyanka Namdeo, Priti Singh and Deeksha Sharma.2021. Preparation and Evaluation of Herbal Antibacterial Mouthwash against Oral Pathogens: Research Article, World Journal of Pharmacy And Pharmaceutical Sciences; 10(3): 1429-1439.
- [10] The ayurvedic pharmacopeia of India part- 1, first edition, volume II, 162-167
- [11] Betty P Jackson, Atlas of Microscopy of medicinal plants culinary herbs & spices, CBS, 62, 64
- [12] Renuka S, Muralidharan NP.2017. Comparison in benefits of herbal mouthwashes with chlorhexidine mouthwash: A review. Asian J Pharm Clin Res; 10(2): 3-7