

Synergistic Approach: Integrating Traditional Herbal Remedies with Modern Science for Effective Antifungal Soap Formulation

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Abstract

Fungal skin infections are most common amongst people, requiring significant attention for treatment and also to maintain good and healthy skin. Some herbal plants have antifungal activity. The aim and objective of the present study is to formulate antifungal herbal bath soap using different herbal plants. To prepare soap having antifungal properties. Antifungal soap having herbal active pharmaceutical ingredient. To improve the efficacy of antifungal soap on fungal infection. In order to reduce the side effect. Formulation and Evaluation of Antifungal Soap of Garlic, tea tree Oil, cassia tora. The antifungal activity of the prepared formulation was tested using agar diffusion method against the organism Candida albicans. The prepared herbal soap formulations exhibited a good antifungal effect.

Key words: antifungal soap, herbal soap, natural soap, tea tree oil alicin from garlic.

Introduction

For many centuries, traditional healthcare has been flourishing in India, constituting its rich heritage of traditional medicine with different components like Ayurveda, Siddha, and Unani.

Ayurveda and other India Indian systems of medicines may be explored with the modern scientific approaches for better leads in the health care.

Antifungal soap is types of soap that may help people get rid of various fungal infections This type of soap is typically effective against athlete's foot and jock itch. It may also be useful for treating other non-fungal skin conditions such as psoriasis and eczema. Antifungal soap may be able to eliminate athlete's foot, a condition that may require periodic use. This type of infection is often caught by people who frequently use public showers Some of the most likely places to pick up athlete's foot include truck stops, public swimming areas, and fitness centers with showers.

Different types of fungal infections:

- 1. athlete's foot
- 2. yeast infection
- 3. ringworm
- 4. nail fungus
- 5. oral thrush





Causes

- 1. Recent antibiotic course
- 2. Whether
- 3. Personal habits
- 4. Occupation
- 5. Chemotherapy

Symptoms

- 1. Itching
- 2. Soreness
- Redness in affected area
- 4. Painless lumph
- 5. Discoloured thik or cracked nails

Literature review

Sr No.	TITLE	AUTHOR NAME	JOURNAL NAME	PUBLICAT ION YEAR
	FORMULAT ION AND EVALUATIO N OF ANTIFUNG AL HERBAL SOAP	S.SANDHI YA	INTERNATION AL JOURNAL OF PHARMACY AND PHARMACEUT ICAL RESEARCH	2023
2.	FORMULAT ION AND EVALUATIO N OF POLYHERB AL SOAP	PRAKASH	WORLD JOURNAL OF PHARMACEUT ICAL AND MEDICAL RESEARCH	2022
3.	FORMULAT ION AND EVALUATIO N OF ANTIFUNG AL SOAP OF GARLIC OIL	RUTUJA R.	ASIAN JOURNAL OF PHARMACEUT ICAL RESEARCH	2020

Material and methods

API

- 1. Tea tree oil
- 2. Garlic
- 3. Cassia tora

Excipients

- 1. Soap base
- 2. Glycerine
- 3. Distilled water

- 4. Methyl paraben
- 5. Perfume

Formulation table

Sr. No	Ingredient	Quantity	Role of ingredient
1	Soap base	15gm	Cleansing agent
2	Garlic extraction	3 ml	Antifungal agent
3	Tea tree oil	3 drop	Antifungal agent
4	Methanolic extraction of cassia tora	3 ml	Antifungal agent
5	Glycerine	3.5ml	Moisturizing agent
6	Distilled water	2.5ml	Vehicle
7	Methyl paraben	0.1ml	Preservative

Method

Soap is prepared by the saponification method.

Result and conclusion

Sr. No.	Parameter	Result
1.	Formulation	Soap
2.	Colour	Redish black
3.	Odour	Aromatic
4.	Appearance	Good
5.	pН	6-7
7.	Foam height (cm)	24 cm
8.	Foam retention (min)	2.5 min

- 1. Soaps are generally used for the removal of germ and for cleaning purpose.
- 2. Soap using is very common and now days need of especially antifungal soaps.
- 3. Different research article claim that antifungal soaps we can get dual function, removal as well as killing of fungi.
- 4. The purpose study was to determine the antifungal activity of garlic, cassia tora, tea tree oil.
- 5. This study suggested that antifungal soaps are used to remove and kill fungal infection as well as prevent body odour which is caused by fungal group.

Reference

Rutuja R. Sh ah1, Mr. Rohan R. Vakhariya2 ASIAN JOURNAL OF PHARMACETICAL RESEARCH

- 2. FORMULATION AND EVALUATION OF POLYHERBAL SOAP SELVAMINI M., SURYAPRAKASHAN R. WORLD JOURNAL OF PHARMACEUTICAL AMD MEDICAL RESEARCH
- 3. FORMULATION AND EVALUATION OF ANTIFUNGAL SOAP L.,GOPI, SANDHIYA, IJPPR.

