



## Preparation of Herbal Syrup Using Mulethi

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### ABSTRACT:

This recipe outlines the preparation of a herbal syrup utilizing mulethi (licorice root), renowned for its medicinal properties. The process involves creating a mulethi decoction by boiling chopped or crushed mulethi roots in water, then straining the liquid to remove solid particles. Subsequently, honey is added to the decoction to sweeten it, creating a palatable syrup. The syrup can be stored in sterilized glass bottles and consumed daily for its potential health benefits, particularly for soothing sore throats and coughs. However, it's essential to consult with a healthcare professional before incorporating herbal remedies into one's routine.

**Keywords:** Herbal syrup, Mulethi, Licorice root, Decoction, Honey, Medicinal properties, Sore throat, Cough, Natural remedy.

### 1. INTRODUCTION:

In the realm of traditional medicine, herbal remedies have maintained their significance for centuries, offering a holistic approach to health and wellness. Among the plethora of botanical treasures, mulethi, also known as licorice root, emerges as a standout due to its multifaceted therapeutic properties deeply rooted in ancient practices. The robust medicinal profile of mulethi is attributed to its rich composition of bioactive compounds, including glycyrrhizin, flavonoids, and saponins, each contributing to its anti-inflammatory, antimicrobial, and expectorant prowess.

In response to the growing interest in natural remedies, this article endeavors to elucidate a simple yet potent method for crafting a herbal syrup utilizing the formidable mulethi. This syrup serves as a conduit to unlock the healing potential of mulethi in a palatable and accessible form. By meticulously outlining the preparation process, delineating its potential health benefits, and addressing safety considerations, this guide aims to empower individuals seeking natural alternatives for common ailments such as sore throats and coughs.

Through the following sections, readers will embark on a journey delving into the rich tradition of herbal medicine, exploring the therapeutic wonders of mulethi, and discovering a harmonious fusion of ancient wisdom and modern practicality in the creation of this herbal syrup.

### 2. PROBLEM STATEMENT

The challenge is to harness the therapeutic potential of mulethi (licorice root) to create a herbal syrup addressing common health issues like sore throats and coughs. The objective is to develop a formulation that balances simplicity, efficacy, and safety, catering to the growing demand for natural remedies. By providing clear guidance on preparation methods and usage precautions, this initiative aims to empower individuals seeking holistic wellness alternatives. The solution must bridge the gap between traditional herbal medicine and modern practicality, offering a convenient and accessible means to leverage the healing properties of mulethi in a palatable form.

### 3. OBJECTIVE AND SCOPE

The primary objective is to formulate a herbal syrup utilizing mulethi (licorice root) that effectively addresses common health concerns such as sore throats and coughs. This involves optimizing the preparation process to maximize the retention of mulethi's therapeutic properties while ensuring simplicity and palatability. Additionally, the objective is to provide clear guidelines on the safe and appropriate usage of the herbal syrup, including dosage recommendations and potential contraindications. Ultimately, the aim is to offer individuals a natural and accessible alternative for managing minor ailments, promoting holistic wellness, and bridging the gap between traditional herbal medicine and modern healthcare practices.

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#### 4. MATERIAL USED:

##### 4.1 APPARATUS

- Measuring Instruments
- Heat Source
- Cooking Utensils
- Straining and Filtration
- Storage Containers
- Labeling Materials

##### 4.2 INGREDIENT USED:

- **Mulethi (Licorice Root)**
- **Sweetening Agents:**
- **Flavor Enhancers (Optional)**
  - Ginger
  - Tulsi (Holy Basil)
  - Cinnamon
- **Other Ingredients (Optional)**
  - Water
  - Citric Acid
  - Natural Food Coloring

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#### 5. PROCEDURE:

##### 1) PREPARATION OF SIMPLE SYRUP (50%):

Weighing the sucrose properly and add water to sucrose in a beaker and heat on hot plate until sucrose dissolves add Sufficient boiling water to produce the final volume.

##### ▪ COMPOSITION:

**Table No. 3 : Composition of simple syrup**

S. NO.	INGREDIENTS	OFFICIAL QUANTITY	REQUIRED QUANTITY



1.	SUCROSE	50 GM	25 GM
2.	DISTILLED WATER	100 ML	50 ML

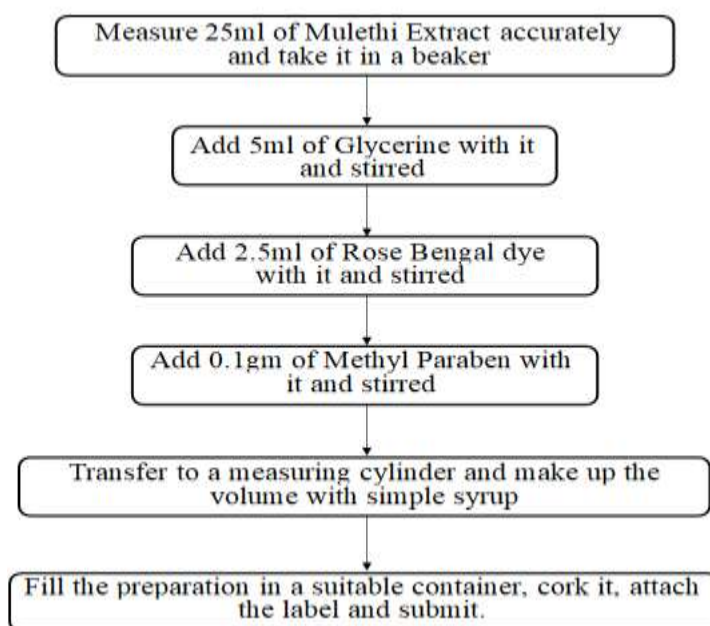
**Fig. No. 5 : Simple Syrup****2) PREPARATION OF ROSE BENGAL DYE:**

Weighing the rose bengal dye properly and Add water to Rose Bengal dye and stirring until Rose Bengal dye dissolved.

- **COMPOSITION:**

**Table No. : 4 Composition of Rose Bengal Dye**

SL.NO	INGREDIENTS	OFFICIAL QUANTITIES (100ML)	REQUIRED QUANTITIES (20ML)
1	ROSE BENGAL DYE	1GM	0.2GM
2	DISTILLED WATER	100ML	20ML

**Fig. No.: 6 Rose Bengal Dye****3) PREPARATION OF MULETHI SYRUP (50ml):**

- **COMPOSITION:**

**Table No.5: Composition Of Mulethi Syrup**

SL.NO	INGREDIENTS	OFFICIAL QUANTITIES (100ML)	REQUIRED QUANTITIES (50ML)
1	MULETHI EXTRACT	50ML	25ML
2	GLYCERINE	10ML	5ML
3	METHYL PARABEN	0.2GM	0.1GM
4	ROSE BENGAL DYE	5ML	2.5ML
5	SIMPLE SYRUP (Q.S)	100ML	50ML

#### **FINAL PREVIEW OF MULETHI SYRUP:**



**Figure:** Final Preview Of Mulethi Syrup

## **RESULT AND DISCUSSION**

#### **Macroscopic character:**

- It appears as slender, cylindrical roots with a rough, wrinkled outer surface.
- Internally, it displays a fibrous and woody core surrounded by a thin inner bark.
- Mulethi emits a sweet aroma and has an intensely sweet taste with a hint of bitterness.
- Its size, shape, and surface features may vary, but it generally maintains a consistent sweet flavor and aromatic profile.

#### **Phytochemical Screening:**

Preliminary phytochemical screening was performed in the extract of *mulethi* in the presence of Glycosides, Alkaloids, Tannins, Flavonoids, Carbohydrates, Triterpenoids.

**Table No 6 : Phytochemical screening of extract of Mulethi**

Sr No	Types of phytochemical	Test Name	Result
1	Alkaloid	Dragendroff's Test	Positive
2	Alakloid	Mayer's Test	Positive
3	Alkaloid	Wagner's Test	Positive
4	Flavonoids	Ferric chloride Test	Positive

5	Flavonoids	Alkaline Test	Positive
6	Glycosides	Bontager Test	Positive
7	Tannins	Gelatin Test	Positive
8	Titerpenoids	Sulphur Powder Test	Positive

## 6. CONCLUSION:

The mulethi-based herbal syrup presents a potent remedy for sore throats and coughs. Its simplicity and effectiveness cater to those seeking natural solutions. Clear usage guidelines are imperative for safety. Overall, it signifies a harmonious fusion of traditional and modern healthcare, promoting holistic well-being. Further research may unveil additional benefits and applications, contributing to the evolving landscape of natural remedies.

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