

# The Role of “Caralluma Fimbrita” in Managing Appetite Suppression Associated with Respiratory Infection

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**Abstract:** *Caralluma fimbriata* is a perennial, succulent plant traditionally used in Indian herbal medicine for appetite suppression and endurance enhancement.. A shift in unconventional strategies as herbal products for treating obesity have been investigated and one such plant extract is *Caralluma fimbriata* (*C. fimbriata*). *fimbriata* as an appetite suppressant and weight loss supplement. *Caralluma fimbriata* is an edible cactus traditionally used in India as a portable food and hunger suppressant, which has been the subject of several research studies focusing on its potential for weight management and metabolic health..

**Keywords:** caralluma Fimbrita, Herbal supplement, Anti-obesity, Antioxidant, Metabolic health

## I. INTRODUCTION

*Caralluma fimbriata* is a perennial, succulent plant belonging to the family Apocynaceae. It is commonly found in dry and arid regions of India, especially in states like Rajasthan, Gujarat, and Maharashtra. Traditionally, it has been used as a natural appetite suppressant and famine food by tribal communities.

It has been used as a portable food and thirst quencher for hunting. It is also used for its purported ability to suppress hunger and appetite and enhance stamina.

The plant contains bioactive compounds such as pregnane glycosides, flavonoids, and saponins, which are responsible for its pharmacological activities. *Caralluma fimbriata* is a succulent, cactus-like medicinal plant belonging to the family Apocynaceae. It is commonly found in dry and arid regions of India, especially in states like Rajasthan, Gujarat, and parts of South India.

It has been traditionally used as a natural appetite suppressant by tribal communities. The plant is often eaten raw or cooked as a vegetable during long hunts to reduce hunger and increase endurance.

It contains bioactive compounds such as pregnane glycosides, flavonoids, and saponins. Phytochemically, the plant contains compounds such as pregnane glycosides, flavonoids, saponins, and alkaloids, which are believed to contribute to its appetite-suppressing and fat-reducing properties.





Fig no.3.1, caralluma Fimbriata plant

Caralluma fimbriata is an important herbal plant with both traditional and modern therapeutic significance, especially in the field of weight management and nutritional supplementation.

**Advantage -**

- Safe Herbal Option
- Antioxidant Properties
- Blood Sugar Control
- Cholesterol Reduction
- Improves Energy Levels
- Weight Loss Support

**Literature Review**

Caralluma fimbriata is a succulent medicinal plant belonging to the family Apocynaceae. It is widely distributed in India, Africa, and parts of the Middle East. Traditionally, it has been used as a famine food and appetite suppressant, especially by tribal communities during long hunts. In recent years, it has gained attention as a herbal anti-obesity supplement due to its potential role in appetite control and weight management.

Kingdom : Plantae



Division : Angiosperms (Flowering plants)



Class : Dicotyledonae (Dicots)



Order : Gentianales



Family : Apocynaceae



↓  
Genus : Caralluma

↓  
Species : Caralluma fimbriata

### Key Theories Or Concept -

#### 1. Appetite Suppression Theory

The main concept is central appetite regulation

Active constituents (pregnane glycosides) act on the hypothalamus They create a feeling of fullness (satiety)

Helps reduce calorie intake → useful in weight management Exam keyword: Anorexigenic effect

#### 2. Anti-Obesity Mechanism Inhibits fat accumulation

May reduce lipogenesis (fat formation) Promotes utilization of stored fat Concept: Energy balance regulation

3. Blood Glucose Regulation Theory Helps in stabilizing blood sugar levels Reduces sudden hunger spikes

Useful in metabolic syndrome Concept: Glycemic control

#### 4. Phytochemical Activity Concept Contains:

Pregnane glycosides Flavonoids

Saponins

These compounds show: Appetite suppression

Antioxidant activity

### Materials Requirements

#### Materials

Caralluma fimbriata extract (dried powder / aqueous extract)

Distilled water

Sucrose / Sorbitol (sweetening agent)

Glycerin (co-solvent, viscosity enhancer)

Preservatives (e.g., sodium benzoate / methyl paraben)

Flavoring agent (optional)

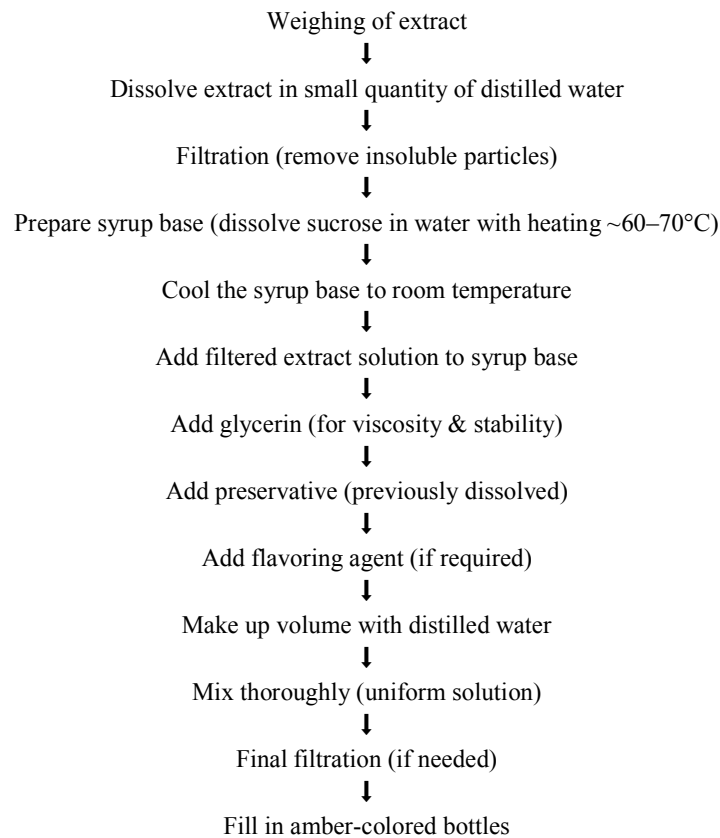
Measuring cylinder, beaker, stirrer, muslin cloth / filter paper



Formula -

Sr. no	Ingredient	Category	Quantity for 20 ml
1.	Caralluma Fimbriata extract	Active ingredient	200 mg(0.2gm)
2.	Sucrose	Sweetner	12gm
3.	Glycerin	Co-solvent	2ml
4.	Propylene glycol	Co- solvent	1ml
5.	Sodium benzoate	Preservative	20mg
6.	Citric acid	PH adjuster	10 mg
7.	Purified water	Vehicle	q.s to 20 ml

Procedure -



**Data collection**

1. Details about plant

Botanical name- caralluma Fimbriata Common name-

Hunger cactus-Plant utilized

Entire plant

Important components Prganane glycoside Flavonoids Saponins

Alkolids



2. Pharmacological Activity -

1. Anti - obesity activity

Supress apttite by acting on hypothalmus

2. Anti -diabetic activity

3. Anti - oxidant activity

4. Anti -inflammatory activity 3. Formulatoin information-

Dosage form - syrup

Type of extract- aqueous extract Additives- preservative, glycerin, honey

4. Use in therapy -

- Obesity (weight management)

- appetite suppression

- control blood glucose level

- Helps to lower cholesterol and triglycerides

5. Assisment criteria -

colour - Brown to dark brown Odour -characteristics

Taste- better and sweet Appearance- free from particles

6. Safety information -

-avoid use in pregnant and breastfeeding women

-Over use of drug may cause digestion problem

7. Conventional and research assistantance-

conventional use- famine food, appetite suppressant Research aspects - anti- obesity, anti -Diabetic

**Result and Discussion**

**Organoleptic properties -**

Caralluma Fimbriata gives several advantages the liyd from increase absorption, the bitterness of syrup stimulate digestion and metabolism. The transverse section of the steam caralluma Fimbriata mainly used for syrup formation. Caralluma Fimbriata syrup not only improve parsability but also increase it's therapeutic activity.



Fig no 6.1 The Final Syrup



**Phytochemical properties -**

PH(4.0 to 5.0 ) maintain for stability  
Great viscosity increase pateint acceptance  
No turbidity

**Discussion**

The formulation of caralluma Fimbrita syrup shows acceptable pharmaceutical quality and therapeutic potential the organoleptic properties of syrup indicates true result of plant extract with palatable base the clarity and nothing any particulate substance shows proper filtration and good formulative technique. Caralluma Fimbrita syrup consider safe, effective herbal formulation for appetite suppression and weight management.

**II. CONCLUSION**

The caralluma Fimbrita syrup is stable and effective herbal formulation with good physiochemical properties and use for anti- obesityactivity,suitable for weight management.

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