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# **Formulation of Amla Cough Syrup**

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**Abstract**: The cough is one of the most common problems faced all people. There are mainly two Type of cough, one is Dry cough and another one wet cough. Dry cough is no mucous Secretion while in wet cough there is cough with mucous secretion. Syrup is commonly Used and popular dosage form which is used to cure cough and cold, because it having Easy to patient compliance. The herbal cough syrup was formulated using crude drugs As Marshmallow root (as a anti-irritant), Elderberry (as a anti-bacterial), Pineapple (as a Anti-inflammatory) & Ivy (as a anti-viral). Quality of herbal cough syrup was evaluated For pre-formulation and post formulation like density, viscosity, pH and various Organoleptic characteristic.

Keywords: cough syrup, dry and wet cough, decoction extraction, evaluation

#### I. INTRODUCTION

Amla cough syrup is defined as decoction with Honey or sugar. Amla cough syrup is formulated Using crude drugs as turmeric, Tulsi, ginger powder, Liquorice, amla etc. amla cough Syrup is used in both dry & wet cough. The cough Syrup medication is a liquid dosage form use of Oral liquid pharmaceutical has been confirm on Basic ease of administration to those people to Have the problem in swallowing of solid dosage Form of medication. Syrup is a concentrated Solution contains sugar/honey and purified water. When syrup without a medication but the Flavouring agent present are known as flavoured Syrup or non-medicated syrup. Flavoured syrup Are frequently used as a vehicle for unpleasant test Of medication results is medicated syrups. Syrup is Very prominent delivery vehicle use for the anti-Tussive medication because they give a more Soothing to swallow then the tablet and capsule. another name for "Cough" is "tussis", the Voluntary or involuntary act which clears the Throat and breathing passage of foreign particles, Microbes, irritants, fluids and mucus is nothing but cough. It is the rapid expulsion of air from lungs. When we Have blockage or irritation in the throat or upper air Passage, the brain thinks a foreign element is there in Body and it inform body immediately to cough to expel Out foreign element out of our body. The cough reflex Consists of the 3 phases which are an inhalation, a forced Exhalation against a closed glottis, and a violent release of Air from the lungs following opening of the glottis, and Followed by a distinctive sound . It is symptom related To most respiratory problems such as asthma, viral Infections, lung cancer, tuberculosis, pulmonary embolus. The repetition of coughing produces inflammation and Discomfort, which result in more coughing in individual . Respiratory tract infections are mostly common in Children; some of them are self-limiting and the risk of Complication may be very small.

#### Advantages

- 1. Improve immunological reaction.
- 2. Greater acceptance in the culture.
- 3. Greater suitability for the human body.
- 4. Less expensive and no/fewer negative effects.
- 5. Organic and freely accessible.
- 6. Manages serious illnesses like Alzheimer's and other.

#### Disadvantages

- 1. Wild herb poisoning danger.
- 2. Lack of adequate regulation.

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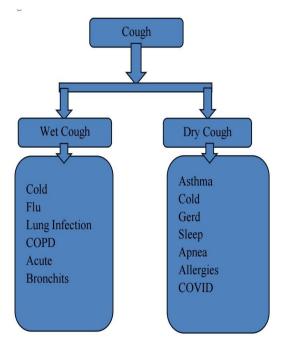
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- 3 There are no dosing guidelines.
- Herbs and contemporary medicine interact. 5. Unsuitable for many health conditions.

#### **Classification of cough syrup**



Types of cough :-

- 1. Acute Cough.
- 2. Chronic Cough.
- 3. Dry Cough.
- 4. Wet Cough.
- 5. Cough From Chest and Throat.

#### **II. REVIEW LITERATURE**

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- 5. Kraft (1999) Noted That The High L Creates A Protective Layer Over Irritated Mucosa, Particularly Effective In Cases Of Dry Cough And Pharyngitis. Clinical Data Suggest Symptom Relief Within Days Of Marshmallow Based Syrup Use.

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#### Aim :-

Formulation of Amla cough syrup.

#### **Objectives :-**

- 1. Soothing throat irritation.
- 2. Reducing inflammation.
- 3. Natural remedy forrespiratory issues.
- 4. Relieving cough symptoms.
- 5. It is a non-alcoholic formulation.
- 6. It is effective in dissolution and removing congealed cough and phlegm.
- 7. It is non habit forming.
- 8. Cures cold, sore throat and bronchitis.
- 9. Promotes easy breathing.
- 10. Very effective against allergic cough and smoker cough.
- 11. Relieves dry And wet cough.

#### **Benefits :-**

- 1. Amla Cough syrup can have a stronger.
- 2. Amla Cough syrup it is therapeutic effectiveness.
- 3. It is convenience.
- 4. Amla Cough syrup immune system boost.
- It is cough relief. Herbs Ingredients ginger, turmeric, Liquorice, Tulsi They are used mostly Antibacterial, Anti-Inflammatory They properties are help to the Relief the cough.
- 6. Sooting.
- 7. It is an effective in productive and unproductive.
- 8. It is used in an anti-allergic and protest allergic cough syrup.

#### Plan of work :-

- 1. Extensive literature survey.
- 2. Selection of plant material and method. Collection of Herb.
- 3. Organoleptic identification of herb.
- 4. Drying and Processing of herbs.
- 5. Extraction of crude herbal drugs. Preparation of herbal
- 6. Cough Syrup. Evaluation of herbal cough syrup. Colour ,Odour ,Taste, PH.
- 7. Viscosity.
- 8. Result & discussion,
- 9. Summary & Conclusion.

#### **III. MATERIALS AND METHOD**

#### 1. Amla :-

#### a :-

Family – phyllanthaceae.

Synonyms - indian gooseberry, Emblic myrobalan and Amalaki. Botanical name - Emblica Officinalis Gaertn.

Common name – Indian gooseberry.

Biological source - The fruit of the phyllanthus Emblica tree.

Uses :-

Boosting immunity.

Improving digestion.

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Promoting healthy skin and hair. Supporting overall Well-being. Manage blood sugar level.



#### 2. Turmeric powder

Family – zingiberaceae.
Synonym – Curcuma,Haldi,Rhizome, curcuma.
Biological Name –Curcuma longa.
Common name – turmeric, haldi.
Biological source – it is dried rhizomes of curcuma longa linn.
Uses :
Cosmetic.
As Antifungal.
An Anti-Inflammatory.
Protect Lungs.
Antiviral.



3. Tulsi powder Family: - Lamiaceae. Copyright to IJARSCT www.ijarsct.co.in



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Synonym – holy basil, sacred basil Biological name – ocimum sactum, ocimum tenuifloorum Common name – tulsi Biological source – it consist of fresh and leaves of ocimum sactum

Uses :-

- 1. Anti-bacterial.
- 2. As antisecticidal.
- 3. As antiseptic.
- 4. Antiviral.
- 5. Antibiotic.
- 6. As anti-tussive.



#### 4. Ginger powder

Family - zingiberaceae.

Synonym - zingiber, rhizome, zingiberis

Biological name - zingiber officinale

Common Name - ginger, african ginger

Biological source – It consist of dried rhizomes of zingiber OfficinaleChemical constituents – ginger contains about 0.25-3% of volatile oil, 5-8% resinous matter 56% starch and protein. Volatile mixture contains a mixture of more than 25 constituents containing monoterpenes and sesquiterpenes.

#### Uses :-

- 1. An anti-tussive.
- 2. An anti-emetic.
- 3. Used as carminative.
- 4. Used to improve digestion.



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5. Liquorice
Family- Leguminoceae.
Synonym-Liquorice root
Biological Name -glycyrrhiza glabra
Common Name- Mulethi
Biological source- It consist of dried peeled and unpeeled roots and stolen of the plant glycyrrhiza glabra
Chemical constituent- It consist glycyrrhizin, glycyrrhetinic acid , flavone glycoside , glucose (upto 4%) sucrose 2.5-6.5% resins aspargine and fat
Uses :Used as demulucent .
Used as expectorant.



6. Honey :-Family – Apidae.
Synonym – Madh.
Common name – madh.
Biological source – it is a substance which is deposited by the honey camb by the species of app miliferea and other Species of apps.
Chemical constituent – It is consist glucose 30to 40%samll quality of sucrose dextrin of formic acidIt is also contain Protein, enzymes, vitamins.
Uses :-It is used as sweetening agent .
It is used as medicine.



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7. Lemon oil

Family – Rutaceae.

Synonyms - oil of lemon, citrus limon peel oil,or citrus medica var,limonum Oil.

Biological name - citrus limonum.

Common name – citrus limon oil.

Biological source - the peel of the lemon fruit, specifically the oil-contaning Cells with in the skin.

#### Uses :-

- 1. Help to easy acne symptoms.
- 2. Easy symptom of morning sickness.
- 3. Combat stress and low mood.
- 4. Improve focus and Concentration.
- 5. Promote wound healing.



#### Formulation table :-

Ingredients	Quantity
Amla powder	15 gm
Tulsi powder	3 gm
Ginger powder	3 gm
Honey	10 ml
Liquorice	8 ml
Turmeric powder	3 gm
Lemon oil	3 gm
Water	Make upto 50 ml

#### **Procedure :-**

1.1.Material/ Instruments Used -

The materialor Instruments used this work bottom flask, funnel, spatula ,beaker, reflux condenser.

1.2.Sample /herbal Drug collection -

All the herbal drug was collected from the labs and local Market.

1.3. Processing of herbal Drug -

All the herbal crude ware dried and powdered by using electric grinder

1.3.EXTRACTION OF HERBAL DRUGS -

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3-5 gm of each herbal ingredients

Herbs was mixed using 50 ml of water

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Attach reflux condenser and material was boil under carefully by using water bath for 3hours

Boil until total volume becomes one forth part of previous

Then liquid was cooled and filtered

#### Formulation procedure :-

1.To prepare the final cough macerated ginger powder, honey mixed With medicated solution of tulsi pawar.

2.Add solution Liquorice, amla powder slowely and continusly Sterred.

3.Add turmeric powder and flavouring agent and lemon oil as Preservatives.

4.Herbal cough syrup was prepared.



#### Formulation images :-



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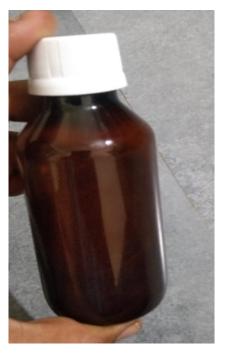
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#### **Evaluation parameters :-**

Test	Observation
Colour	Yellowish brown
Odour	Aromatic
Taste	Sweet
pН	7
Viscosity	4.96 cp
Density	1.17 gm / ml

#### **IV. RESULT**

1. Colour : The colour of amla cough syrup formulation was found to be yellowish Brown.

- 2. Odour : The result obtained for odour is aromatic formulated of cough syrup.
- 3. Taste :The results obtained for taste is sweet formulated of cough Syrup.

4. pH : The result obtained for pH -7 formulated of cough syrup.

5. Viscosity : The result obtained for viscosity is 4.96 cp formulated of cough syrup.

#### V. CONCLUSION

The aim of this project was to formulations of amla cough syrup. The present study helped us to Understand what actually cough means, what are different types of coughs, factors responsible for Causing cough. Herbal treatments for cough were studied briefly. As the study shows that the herbal Treatment is more beneficial than that of allopathy treatment which uses standard drugs for Treatment as Herbal drugs have less or no side effects. Herbal treatments are more preferred Widely. Herbal drugs are easy to available than that of prescribed drugs. This study helps us to Understand cough and measures to be taken in order to avoid cough. The pre-formulation studies of All three formulations were within specification. Three formulations were prepared and evaluation Test such as colour, odour, taste and pH were performed. The present study will help us to Understand effectiveness of amla cough syrup compared to herbal based syrups.

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