



Formulation and Evaluation of Herbal Syrup

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ABSTRACT

The cough it is almost common problem are face by the all people .There are two types of cough one is the Dry cough and second is wet cough .The dry cough is a no mucous and secretion while in wet cough there is cough mucous or secretion .The syrup is most commonly used and popular dosage form there is used in cure the cough and cold because it having ease of patient's compliance. The herbal cough syrup was formulated using crude drugs as a Adulsa , Tulsi or garlic as a main ingredient along with Honey. Today syrup is used for treatment of May ailments and to overcome symptoms of disease. The antioxidant syrup is used to treatment the cancer because of many stress condition and other oxidative reaction in body the free radical are generated by using theses, syrup the condition is overcome .Formulation at laboratory scale was one and evaluate for number of parameters such as PH, viscosity, Density ,stability testing during evaluation formulation found to be stable and ready to use in a cough treatment .It is found that Anti tussive activity produced by the Herbal formulation in the minimum dose was much better than the standard drug

INTRODUCTION :

Herbal syrup: Herbal syrup it is a defined as a prepared and combination and concentration decoction with Honey sugar or either some time use alcohol.

The base of such syrup is a strong herbal decoction and mixing a decoction with sugar honey help to thicken preserves the decoction

Herbal plant and formulation are used for many types of disease like cough syrup and other disease.

The cough syrup many types of herbal plant are used for Adulsa , Tulsi , black pepper, honey in that whole plant is used for making herbal medicine the many years. Herbal formulation a most commonly used a development as well as developing countries as health care.

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 who have the problem in the swallowing of solid dosage from medication. Syrup is a concentrated solution contains sugar and purified water. In syrup from the other type of syrup solutions. The syrup I may be or may not be containing medication or mixed flavoring agent. When the syrup without a medication but the flavoring agent present are known as flavored or non- medicated syrup Flavored syrup are frequently used as vehicle for the unpleasant test of medications results (found as) is medicated syrups.

AIM : The aim of the project is formulation and evaluation of the herbal syrup .

OBJECTIVE :

- It can relieve symptoms of cold and cough such as congestion coughing and sore throat.
- It can help soothe and improve the respiratory system.
- It can boost the immune system and helps the body fight infection.
- It can reduce inflammation in respiratory system.
- It can help to loosen and expel mucus from the lungs, thus providing relief from congestion.
- It can reduce coughing and help you sleep better.
- It is a natural and safe alternative to prescription medication.

➤ Herbal syrup was used to sweeten the test better medicinal herbs to make them more palatable and prolong preservation.

➤ Clinical investigation is need of future concern.

➤ Accelerated stability studies are need of future concern.

MATERIAL

A. Selected ingredients formulation of herbal syrup:-

1. **Justicia Adhatoda**
2. **Holy Basil**
3. **Black Pepper**
4. **Fennel**
5. **Garlic**
6. **Honey**

B. FORMULA

SR.NO:	Ingredients	Category	Optimized	
			Formulation (a)	Formulation(b)
1	Adulsa	Anti-tussive	2gm	4gm
2	Tulsi	Anti-tussive	12 leaves	20 leaves
3	Black Pepper(piper nigrum)	Anti-bacterial	3gm	4gm
4	Fennel	Aromatic/ flavouring agent	4gm	4gm
5	Garlic (A.sativum)	Aromatic	5-6 raw	5-7 raw
6	Honey	Base ,viscosity modifier	40%	43%

C. Method of preparation for herbal syrup :

Method of decoction :-

Take 5-7 gm of each herbal ingredient. Then herbs were mixed using 500ml of water and Material was boiled under carefully by using water bath for 3 hr. boil until total volume become One forth part of previous. Then liquid was cooled and filtered.

To prepared final herbal syrup 24ml of Adulsa decoction and 24ml of Tulsi or 20 ml of black pepper decoction was added and 22ml fennel and 10ml garlic also were added. 50% of honey preservative and 66.7% sugar solution was mixed slowly by side by side continually stirring.

The final herbal syrup was prepared and then subjected for evaluation.

Herbal syrup was prepared and solubility was checking by observing clarity of solution visually.

Evaluation: -

1. Ash value:

An Ash test involves taking a known 5gm of sample, placing the weighed sample into a dried / pre-weighed porcelain crucible, burning away the crude drug in an air atmosphere at temperatures above 500°C, and weighing the crucible after it is has been cooled to room temperature in a desiccator.

2. Viscosity:

Thoroughly clean Ostwald viscometer with warm chromic Acid and if necessary used.

1. An organic solvent such as acetone
2. Mount viscometer in vertical position on suitable stand
3. Fill water in dry viscometer up to mark G.
4. Count time required, in second for water to flow from mark A to mark B.
5. Repeat step 3 at least three times to obtained accurate reading
6. Rinse viscometer with test liquid and then fill up to mark A, find out the time required for liquid to flow to mark B.

7. Determination of densities of liquid as mentioned in density determination experiment.

Formula for viscosity:

Density of test of liquid \times Time required to flow test liquid

Viscosity = \times viscosity of water

Density of water \times time required to flow water

3. PH Test: -

Determine the pH of syrup by suitable means; it should be 6.0 to 7.0.

4. TURBIDITY TEST: -

It is used to determine the concentration of suspended particle in a sample of water by measuring the incident light scattered at right angle from the sample. The scattered light is captured by photodiode which produce an electronic signal that is converted to turbidity

5. Visual inspection: -

With the visual inspection, the ingredient & the final product are carefully examined for purity & for appearance Physical appearance of product for patient adherence compliance is critical so that it should be good looking & elegance in appearance.

6. Physical stability: -

The syrups must be stable physically e.g., its appearance (no crystallization and microbial growth) Color must be completely soluble with other ingredients.

Odor and taste (palatable) Solid material is completely miscible in liquid.

RESULT AND DISCUSSION :

The result obtained in this study suggest that herbal formulation prepare and possess anti tussive activity the component of herbal cough formulation was selected due to their reportated action that's plays preventative and curative role in prevention of cough. syrup prepared passes all physical parameter and shows the significant anti tussive activity.

SR.NO:	Parameter	Observation/Value
1	Color	Yellowish brown
2	Odour	Aromatic
3	PH	6.2
4	Viscosity	0.0492

EVALUATION RESULT: -

We perform following test and result might be given below: -

Total Ash value of Tulsi :- 3.1 % w/w

Extractive value of Tulsi :- water soluble 17.65% w/w

Alcohol soluble: - 9.4 % w/w

Total Ash value of adulsa :- 12% w/w

Extractive value of adulsa :- water soluble: - 4 % w/w

alcohol insoluble: - 1.5

Total Ash value of black pepper :- 4.98 % w/w

Extractive value of black pepper :- water soluble: - 3.19

Acid insoluble: - 0.93

Total Ash value of fennel :- 9% w/w

Extractive value of fennel :- water soluble: - 16%

Acid insoluble: - 0.50%

Total Ash value of garlic :- 2.3% w/w

Extractive value of garlic :- water soluble :-4.0% w/w

ACID INSOLUBLE :-3.6% W/W

CONCLUSION :

The formulation studies of all this formulation were with in specification also the physicochemical properties of prepare syrup like color odor taste, ph, viscosity, were satisfactory but among the formulation it was within the all specification it has proper concentration of honey as per ip and also good preservative. The present study helps to develop effective and safe herbal 50% w/v honey as a base of cough syrup Clinical trials and stability studies are needed of future concern

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