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FORMULATION AND EVALUATION OF HERBAL SYRUP

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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 1. 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 pudina, Tulsi, Cinnamon, honey in that whole plant are 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 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. Syrup are present in syrup in high amount predisposes then to the bacteria infection so they often. Use as preservative. Syrup are very prominent delivery vehicle use for the anti tissue medication because they give a more soothing to swallow (Ingest) then the tablet and capsule. This medication is quickly observed. There are same available synthetic cough preparations they cause several adverse effect. So the present study was show to enlarge and in violet herbal cough syrup carry natural element having no any side effect. in generalhealth professionals having difficulties of accessing effectiveness and safety

natural treatment (Therapy). Number of instance allopathic medication product has not been studied in large scale and generally they solid without in knowledge of there mechanism of action or side effect.

Even so the use of complementary medication is sometime helpful and the confirmation is same time helpful and the confirmation the effectiveness of some this all medication literature is limited, they frequently sold withthe drug store. A successful formulation of liquid, as well as other dosage forms, requires a blend of scientificacuity and pharmaceutical "art". Oral liquid medicines are being superseded gradually by tablets and capsule because of deleterious changes take place more readily in solution. Nevertheless there are still a large number of liquid oral preparations are available in the official books. The fact is that the absorption of medicaments in solution from the GI tract into the systemic circulation may be expected to occur more rapidly than other oral dosage forms of the same medicinal agent8. Ayurvedicformulations are preferentially administered by oral route, and most of the orally administered Ayurvedic formulations belong to liquid form of drug or drug combination. However herbal medicinal combination.

Types of herbal syrup

1. Flavored syrup
2. Medicated syrup
3. Artificial syrup

Material and Method of preparation

Following herbal part are used in the formulation of herbal syrup.

Pudina

Synonyms: Peppermint, fragrant, Mentha leaves.

Biological source: Pudina consists of dried leaves and obtained from flowering tops of menthe spicatalinn; belonging to family labiatae.

Chemical constituents

The main constituents of menthol (40.7%) and menthone (23.4%) further components were (%+-) menthyl acetate,1,8-cinecole, limonene, beta-pinene and beta caryophyllene.

Fig: Pudina.

Tulsi

Synonyms: Holy basil, sacred basil.

Biological source: It consists of dried leaves of ocimumsantumlinn. Belonging to family labiatae.

Chemical constituents: Pleas-ant volatile oil (0.1to 0.9%), Also consist 70%eugenol and carvacrol (3%) eugenolmethyl-ether(20%).

Fig: Tusli.

Cinnamon

Synonyms: Cortex Cinnamon oil Ceylon cinnamon, Saigon cinnamon, Chinese cassia, Cinnamon oil aromaticum.

Biological source: Cinnamon umzeylanicum is widely cultivated in Ceylon java Sumatra West Indies Mauritius Braziland India.

Belonging to family lauraceae.

Chemical constituents

1. 10% of volatile oil

2. 5 to 10% eugenol
3. 50 to 60% cinnamon aldehyde

Fig: Cinnamon.

Honey

Synonyms: Madhu, Madh.

Biological source: Honey is viscid and sweet secretion stored in the honey combby various species of bees.

I.e APIs florea, APIs dorsata, APIs florea, APIsindica belongingto family Apideae.

Chemical constituents

1. Fibers test for artificial invert sugar.
2. Reduction of feelings solution.
3. Limit test

Fig: Honey.

Method of preparation

Preparation of decoction

The initial stage in studying medicinal plant is the preparation of plant samples to preserve the

biomolecules in the plants prior to extraction. Plants samples such as leaves, barks, roots, fruits and flowers can be extracted from fresh or dried plant materials such as grinding and drying also influences the preservation of phytochemicals in the final extracts.

The weighed crude drug sample 5g of herbal ingredients. Then herbal ingredients were mixed 500ml of water. Then attach reflux condenser and materials was boil under carefully by using water bath for 3 hrs. The mixture was boiled until total volume become one fourth of the volume.

Then the decoction was cooled and filtered. Filtrate was taken to prepare final syrup.

Fig: Preparation of decoction extraction.

Method of preparation for final herbal syrup

To prepared final herbal syrup 16ml of Pudina decoction and 17ml of Tulsi or 17ml of cinnamon decoction was added ad 50% of honey preservative was mixed slowly by side by side continually stirring .

The final herbal syrup was prepared and then subjected for evaluation (fig. 6). Herbal syrup was preparedand solubility was checking by observing clarity of Solution visually.

Table: Formulation table in syrup.

Sr. No.	Ingredients	Quantity	Activity
1.	Pudina	In16ml	Antioxidant
2.	Tulsi	In17ml	Antioxidant
3.	Cinnamon	In17ml	Antitussive
4.	Honey	In 50%	Base viscositymodifier

Evaluation parameters

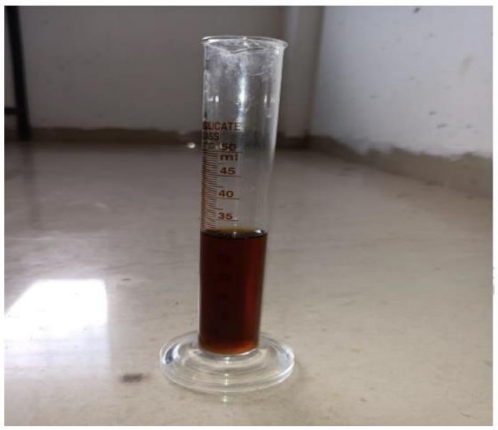

Fig: Herbal syrup formulation.

Formulation studies

Formulations Colour Odour Taste A Yellowish brown Aromatic Slightly pungent B Yellowish brown Aromatic Slightly pungent C Yellowish brown Aromatic Slightly pungent.

Table: Results of physiochemical parameters of formulated herbal syrup.

Formulations	Colour	Odour	Taste
A	Yellowish brown	Aromatic	Slightly pungent
B	Yellowish brown	Aromatic	Slightly pungent
C	Yellowish brown	Aromatic	Slightly pungent

Procedure for glass electrode

1. Prepare 30ml buffer of each pH. The volume of the stock solution to be taken. Prepare the buffer bymixing appropriate volume.
2. Allow the solution for 15minutes to establish equilibrium.
3. Measure the pH of solution using a pH meter.

Solutions: Stock solution: Acetic acid 0.2molar: Dissolve 1.2ml of glacial acetic acid in 100ml of distilled water in a volumetric flask. Molecular weight of glacial acetic acid is 60.605; weight per ml is 1.050.

Buffer solution: Dissolve 10.21 gram of potassium hydrogen phthalate in sufficient Carbon dioxide freewater to produce 1000ml.

Fig: PH paper.

Viscosity

Thoroughly clean the Ostwald viscometer with warm chromic acid and if necessary used:

1. An organic solvent such as acetone.
2. Mount viscometer in vertical position on a suitable stand.3
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 3 times to obtained accurate reading.
6. Rinse viscometer with test liquid and then fill it up to mark A, find out the time required for liquid toflow to mark B.

CONCLUSION

The formulation studies of all these formulation were within specifications. Also the physiochemical properties of prepared syrup like colour, odour, taste, pH, viscosity were satisfactory but among the formulation is was within the all specification it has proper concentration of honey as per Ip and also a good preservative.

The present study help to develop effective and safe herbal cough with 50% w/v honey as a base of coughsyrup.

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