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Preparation and Evaluation of Polyherbal Syrup

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Abstract: *Diseases in human life are one of the huddle to live life, which consist of chronic and acute diseases. Cough is a common respiratory symptom that can have a significant impact on the quality of life. Polyherbal formulations have been used for centuries in traditional medicine to treat coughs and other Respiratory ailments. In this study, we prepared a polyherbal cough syrup using a combination of medicinal Plants which act as a natural ingredients, like Vasaka: Adhatodavasaka (Acanthaceae), Ginber: ZingiberOfficinale (Zingiberaceae), Turmeric: Curcuma longa (Zingiberaceae), Tulsi: Ocimumsantum (Labiatae), And liquorice: Glycyrrhizaglabra (Legiminosae).*

Keywords: polyherbal cough syrup

I. INTRODUCTION

Cough – What is mean by cough?

The human being are suffered with many acute diseases, among that cough is one of them. Coughing occurs when the body's cough reflex is triggered. The cough reflex is a protective mechanism that helps to clear the airways and throat of mucus, irritants, and foreign particles. When the lining of the airways becomes irritated or inflamed, sensory receptors in the airways send signals to the brainstem, which then Triggers the cough reflex.

Introduction to herbal cough syrup.

Herbal cough syrup is a type of natural remedy used to alleviate coughs and other respiratory symptoms. It is made from a variety of herbal ingredients such as honey, ginger, liquorice, vasaka, tulsi& turmeric which are believed to have beneficial properties for the respiratory system.

II. MATERIALS AND METHODS

Material & Equipment :

The various selected plant materials, apparatus and chemicals of Merck were used for the determination And the preparation of formulations including the evaluation parameters.

Methodology:

Collection of Herbs:

The various plants were selected collected based on the ethno-botanical uses And the older proved information. The plant material such as leaves of Vasaka: Adhatodavasaka(Acanthaceae), rhizomes of Ginber: Zingiberofficinale (Zingiberaceae), rhizome part of Turmeric: Curcuma longa (Zingiberaceae), leaves of Tulsi: Ocimumsantum (Labiatae), and finally the rhizomes Of liquorice: Glycyrrhizaglabra (Legiminosae). The collected material were shade dried for several Days from 3 to 8 days.

Preparation of extract

The selected, dried plant material were pulverised to get a coarse powder. The coarse powder of each Kind were taken for extraction process using 1:1 ratio. For the extraction using drinking water as a Solvent for the removal of various phytoconstituents. The heat were provided to enhance the rate of Extraction. Subsequently the content were exposed for the filtration. The filtrate were concentrated till Dryness using cleaned china dish at 40oC.

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Preparation of simple syrup:

The simple syrup were prepared using 66.7 gram of sucrose and finally dissolving in sufficient Quantity of distilled water with ambient boiling. The volume were adjusted up to 100 ml.

III. EVALUTION TEST FOR THE POLY HERBAL COUGH SYRUP

Physiochemical parameters of syrup: he herbal syrup was evaluated for various physicochemical parameters such as physical Appearance (colour, odour, taste), pH, Density and Specific Gravity.

Colour Examination :

Five ml final syrup was taken into watch Glass and placed against white back ground in white tube light. It was observed for its colour by naked eye.

Odour examination :

Two ml of final syrup was smelled individually. The time interval among two smelling was kept 2 minutes To nullify the effect of previous smelling.

Taste examination

A pinch of final syrup was taken and examined for its taste on taste buds of the tongue. Or simply a pinch Of syrup was put on tip off tongue for determining test.

Determination of pH

Placed an accurately measured amount 10 ml of the final syrup in a 100 ml volumetric flask and made up The volume up to 100 ml with distilled water. The solution was sonicated for about 10 minutes. pH was Measured with the help of digital pH meter.

Determination of density

Density of the syrup was determined by using the density bottle method by measuring the weight and the Volume, by the density bottle average density was found to be 1.43g/ml. Specific gravity at 25°C A Thoroughly cleaned and dry Pycnometer was selected and calibrated by filling it with recently Boiled and Cooled water at 25°C and weighing the contents. Assuming that the weight of 1 ml of Water at 250C when Weighed in air of density 0.0012g/ml was 0.99602g.

Determining the viscosity of syrup:

The viscosity of the syrup was determined by using viscometer mainly capillary viscometer, the Average Viscosity of any syrup at 21-30°c temperature is 700-1300 centipoise or cp, the determined Viscosity of Syrup was 880cp.

IV. CONCLUSION

In the present study attempt was made to select plants based on pharmacological actions, later cough syrup was prepared. The prepared herbal cough syrup was the representative of various medicinal plants, used in ration of 1:1, this reflects the equal effect of drug in treatment. The study revealed that prepared formulation of significant in terms of physical parameters as well as in terms of pharmacological effect as a cough syrup. This comprehensive result is due the supportive action of plant constituents for the ppositiv pharmacological actions. This is considered as synergistic effeplanof selected plant.

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