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Spectrophotometric analysis of medicated Liniment by *Hypericum perforatum*- Q

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Abstract

Background: Analytical work was completed by quality assessment of Prepared Homoeopathic liniment in Spectrophotometer.

Methodology: Homoeopathic medicated liniment were prepared by mixing Standard ample of *Hypericum perforatum* Q mixed in the base of chaulmoogra oil as drug and vehicle ratio (1: 9) under indirect heating by Hot water bath.

Results: Each samples were analysed by UV- Visible spectrophotometer, Which shown that absorbance value of *Hypericum perforatum* Q is 0.787 at 611.00 nm, *Hypericum perforatum* liniment is 0.799 at 524.00 nm, chaulmoogra oil is 0.775 at 485.00 nm.

Conclusion: Absorbance capacity of Homoeopathic medicated liniment gives better result by UV-visible spectrophotometer.

Keywords: UV- visible Spectrophotometer, *Hypericum perforatum* Q

Introduction

Hypericum L: (Guttiferae/Clusiaceae/Hypericaceae) containing 465 species internationally [1,2,3] is a huge group of plants with likely restorative worth. Notwithstanding, *H. perforatum* is fundamentally read up for its bioactivities because of its prominence among the downturn patients. *Hypericum perforatum* regularly known as St. John's wort is named so in light of the conventional assortment of its bloom at the dining experience of St. John the Baptist on June 24th 48. It is a perpetual spice local to Asia and Europe [4, 5] yet known universally for its customary and present day utilizes. The utilization of this species as a home grown solution for treat an assortment of inner furthermore, outer sicknesses traces all the way back to the hour of the old Greeks.

From that point forward, it has stayed a well-known treatment for tension, contamination, and wound mending [6, 7, 8]. In most recent few decades, most of exploration on *H. perforatum* depended on its utilization as stimulant, which has extended its fame and made it among the top selling dietary enhancements in the market. Drug organizations, especially in Europe, get ready norm definitions of this spice that are taken by millions of individuals. In addition, it has likewise drawn in the researchers' cerebrum for its calming and antimicrobial properties against the provocative sicknesses [6, 7]

Chaulmoogra oil

It entered Western medication just in the nineteenth 100 years, yet it had been utilized in the East against sickness and different skin conditions for a long time. One customary story concerning the disclosure of the utilization of the oil against infection is accepted to be founded on Burmese legends. As indicated by this story, a Burmese ruler contracted sickness furthermore, was encouraged by the divine beings to pull out from the world and to go into the woodland to contemplate. In the forest he was guided by the divine beings to a tree with a huge organic product with many seeds. He was told to eat the seeds, which he did, and was immediately restored of leprosy [8].

Materials & Methodology

Type of study: Analytical study

Site of study: Centre of Research and Development of Parul University (CR4D), Parul Institute of Homoeopathy and Research, Parul University

Investigational tool: UV- Visible spectrophotometer (Double beam)

Samples

1. Standard *Hypericum perforatum* Q
2. Prepared *Hypericum perforatum* chaulmoogra oil
3. Chaulmoogra oil

Drug and vehicle ratio: Prepared Homoeopathic medicated liniment as the drug and vehicle ratio i.e. (1:9).

Preparation of formulation of oil

The formulation of hair oil takes place in following stages; such as;

1. Sterilization
2. Measurement
3. Mixing
4. Filling
5. Labelling
6. Storage

Sterilization

Before starting the preparation of homoeopathic medicated formulation all the laboratory device were sterilize under hot air oven for at least 10-15 minutes.

Measurement: In this step measuring the volume of Drug *Hypericum perforatum* Q as 1 part and Vehicle (Chaulmoogra oil) 9 parts by measuring pipette (10 ml capacity).

Mixing: Mixing of homoeopathic medicated liniment were done by glass rod until and unless it became homogeneous mixture.

Filling: The solution must be filled in hard glass, colourless bottles, and sterile bottle.

Storage: The homoeopathic medicated oil were placed under cool, dry place, away from sunlight, strong smelling bottles, separate arrangement.

Results

Absorbance value of *Hypericum perforatum* Q is 0.787 at 611.00 nm, *Hypericum perforatum* liniment is 0.799 at 524.00 nm, chaulmoogra oil is 0.775 at 485.00 nm

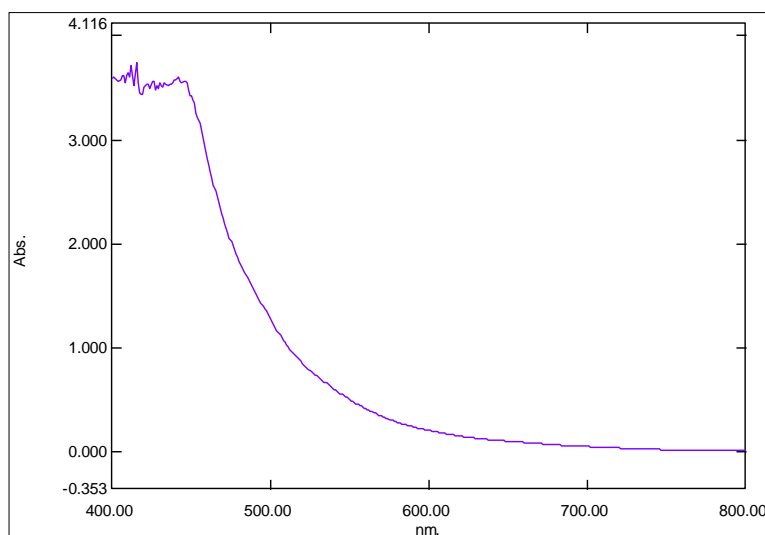


Fig 1: Absorbance value of *Hypericum perforatum* liniment

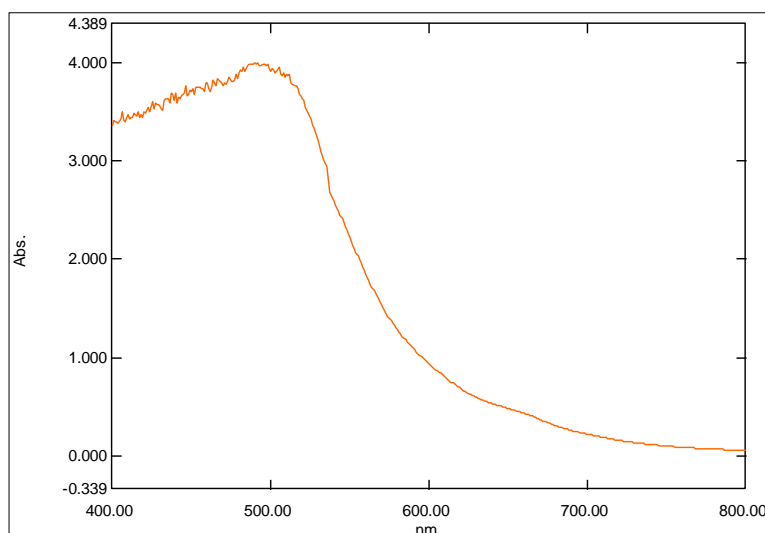


Fig 2: Absorbance value of *Hypericum perforatum* Q

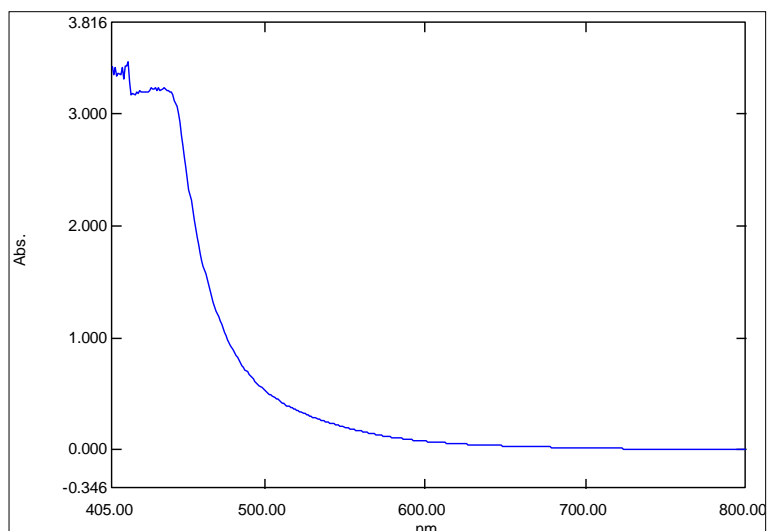


Fig 3: Absorbance value of Chaulmoogra oil

Conclusion

The absorbance capacity of prepared Homoeopathic medicated Liniment were better in terms of absorbance value by UV- Visible spectrophotometer

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