

# EXPRESSION OF INTEREST FOR TECHNOLOGY TRANSFER

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**Ayurvedic product for Anti-HCV Activity  
of *Boerhavia diffusa* L.**

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Name of the invention: Ayurvedic product for Anti-HCV Activity of  
*Boerhavia diffusa* L.

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## Abstract

The present invention relates to a preparation of an ayurvedic formulations using whole plant extract of *B. diffusa* as the major component against HCV NS3 protease genotype 3b.

The efficacy of inhibition of extracts from the plant is accessed by analysing the kinetics of enzyme activity using different substrates for protease, trypsin, chymotrypsin activity of the recombinant HCV NS3 protease.

The formulation comprising *B. diffusa* helps to prevent cirrhosis and is effective for HCV infection apart from hepatic impairment.

# Graphical abstract

**Qualitative and Quantitative phytochemical analysis**



**Evaluation of Anti-oxidant, anti-inflammatory and anti HCC activity of plant Extract**



**In vitro Anti HCV activity analysis**



**Lehya Preparation**



**Filed for patent; patent application number 201741043507**



**Patent Granted on 31/10/2023; 464499 dated 17/12/2017**

Novelty of the invention

This formulation is effective against HCV infection apart from hepatic impairment.

## Utility of the invention:

This formulation may help as a liver tonic to treat jaundise, hepatitis and other liver diseases including HCV infection

It is recommended as a simple, effective, locally available nutraceutical that rejuvenates the liver in normal people and offers an economical mode of treatment in HCV infected patients.

Non-obvious nature of the invention:

This formulation is effective against HCV genotype 3b

## Results:

Determination of Anti-HCV activity was done by enzymatic method, recombinant HCV NS3 protease was used for the studies.

Results:

Determination of hepatoprotective activity was done by D-Gal N toxicity in wistar rats.

## Clauses applied for /protected (for granted patents)

1. An ayurvedic formulation for liver rejuvenation and treatment of hepatitis C Virus, comprising the following ingredients: a) decoctions of *Boerhavia diffusa* L. (1 kilogram of *Boerhavia diffusa* in 2.5 L warm water); b) churna; c) 2.5 kilogram of jaggery; d) 300 grams of ghee; and e) 300 grams of honey.
2. The ayurvedic formulation as claimed in claim 01, wherein said churna comprises: powder of cinnamon, cardamom, black pepper, long piper and dry ginger each present in an amount of 100 grams.
3. The ayurvedic formulation as claimed in claim 01, wherein said *Boerhavia diffusa* L. is a whole herb



. 4. A method for preparing an ayurvedic formulation that rejuvenates the liver and treatment of Hepatitis C Virus, , comprising steps of

- a) dissolving 2.5 kg of jaggery in the decoctions of *Boerhavia diffusa* L. (1 Kilogram of *Boerhavia diffusa* in 2.5 L warm water);
- b) boiling said decoctions of *B.diffusa* said in step a) over a moderate fire to form an inspissated juice;
- c) adding churna to said inspissated juice obtained in step b) in small quantities while stirring vigorously and continuously to form a lump-less, homogenous mixture;
- d) adding 300 grams of ghee to said homogenous mixture obtained in step c) and cooling down said mixture; and e) adding 300 grams of honey to said mixture obtained in step d)

Fields where the patent finds application:  
In medical application **as hepatoprotectant and rejuvenant**

Whether the work has been published: No



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