

Activity of *Saussurea lappa* against Hepatitis C through deactivation of Hepatitis C Virus RNA-Dependent RNA polymerase (5PZL)

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Abstract: An in-silico study was performed to determine the activity of *Saussurea lappa* against Hepatitis C. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Hepatitis C Virus RNA-Dependent RNA polymerase (5PZL) enzyme. It was found that Lutein helped to prevent Hepatitis C.

Introduction: *Saussurea lappa* is known for its medicinal activities. In Unani system of medicine it is used for carminative, aphrodisiac, anthelmintic, tonic, stimulates the brain, used in diseases of liver, kidney and blood. It also used for treating deaf, headache, paralysis, asthma, cough, old fever, inflammation, and ophthalmic conditions.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Asterales
Family	Asteraceae
Genus	<i>Saussurea</i>
Species	<i>lappa</i>

Major phytochemicals present in the plant are:

- Lutein
- Genistein
- Daidzein
- Theobromine

One of the major enzymes required for the survival of the organism causing Hepatitis C is Hepatitis C Virus RNA-Dependent RNA polymerase (5PZL) enzyme. The objective of this work is to find the phytochemical that can deactivate the enzyme, thereby preventing the physiological activity of the organism.