

Activity of *Ranunculus scleratus* against Hepatitis C through deactivation of Hepatitis C Virus protease

(3M5O)

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Abstract: An in-silico study was performed to determine the activity of *Ranunculus scleratus* against Hepatitis C. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Hepatitis C Virus protease

(3M5O) enzyme. It was found that Theobromine helped to prevent Hepatitis C.

Introduction: *Ranunculus scleratus* is known for its medicinal activities. The whole plant has anti-inflammatory, analgesic, sedative and expectorant properties and it is recommended against skin diseases such as eczema, herpes, pruritus, burns and swellings.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Ranunculales
Family	Ranunculaceae
Genus	<i>Ranunculus</i>
Species	<i>scleratus</i>

Major phytochemicals present in the plant are:

- Theobromine
- Daidzein
- Peonidin
- Limonene

One of the major enzymes required for the survival of the organism causing Hepatitis C is Hepatitis C Virus protease

(3M5O) enzyme. The objective of this work is to find the phytochemical that can deactivate the enzyme, thereby preventing the physiological activity of the organism.