Activity of Agrimonia eupatoria 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 Agrimonia eupatoria 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 Phenyl isothiocyanate helped to prevent Hepatitis C.

Introduction: Agrimonia eupatoria is known for its medicinal activities. It is used as a folk remedy for asthma, bronchitis, dermatitis, entorrhagia, enuresis, gastrorrhagia, hematuria, hepatosis, metrorrhagia and neuralgia.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Rosales
Family	Rosaceae
Genus	Agrimonia
Species	eupatoria

Major phytochemicals present in the plant are:

a. Resveratrol
b. Phenyl isothiocyanate
c. Rutin
d. Ferulic acid

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.

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