Activity of Bupleurum sp. against Hepatitis C through deactivation of Hepatitis C Virus IRES Pseudoknot domain

(3T4B)

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Abstract: An in-silico study was performed to determine the activity of Bupleurum sp. against Hepatitis C. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Hepatitis C Virus IRES Pseudoknot domain

(3T4B) enzyme. It was found that Tangeretin helped to prevent Hepatitis C.

Introduction: Bupleurum sp. is known for its medicinal activities. Bupleurum is used for respiratory infections, including the flu (influenza), swine flu, the common cold, bronchitis, and pneumonia; and symptoms of these infections, including fever and cough.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Apiales
Family	Apiaceae
Genus	Bupleurum
Species	scorzonerifolium

Major phytochemicals present in the plant are:

a. Tangeretin
b. Tannic acid
c. Pelletierine
d. Digoxin

One of the major enzymes required for the survival of the organism causing Hepatitis C is Hepatitis C Virus IRES Pseudoknot domain

(3T4B) 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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