Activity of Pericampylus glaucus 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 Pericampylus glaucus 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 Tannic acid helped to prevent Hepatitis C.

Introduction: Pericampylus glaucus is known for its medicinal activities. The mucilage resulting from soaking the pounded leaves overnight is taken orally to cure a swollen spleen and accompanying fever.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Ranunculales
Family	Menispermaceae
Genus	Pericampylus
Species	glaucus

Major phytochemicals present in the plant are:

- a. Pelletierine
- b. Alliin
- c. Theobromine
- d. Tannic acid

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.