

Activity of *Pericampylus glaucus* 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 *Pericampylus glaucus* 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 and 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:

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| Kingdom | Plantae |
| Division | Tracheophyta |
| Class | Magnoliopsida |
| Order | Ranunculales |
| Family | Menispermaceae |
| Genus | <i>Pericampylus</i> |
| Species | <i>glaucus</i> |

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 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.