

Activity of *Potentilla anserina* against Hepatitis C through deactivation of Hepatitis C Virus RNA-Dependent RNA polymerase (5PZL)

Krishna Dipayan Mohanty¹, Sagarika Parida²

¹190705180130@cutm.ac.in

²sagarika.parida@cutm.ac.in

Centurion University of Technology and Management, Odisha, India

Abstract: An in-silico study was performed to determine the activity of *Potentilla anserina* 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 Limonene helped to prevent Hepatitis C.

Introduction: *Potentilla anserina* is known for its medicinal activities. The whole plant is antispasmodic, mildly astringent, diuretic, foot care, haemostatic, odontalgic and tonic.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Rosales
Family	Rosaceae
Genus	Potentilla
Species	anserina

Major phytochemicals present in the plant are:

- a. Lupeol
- b. Peonidin
- c. Limonene
- d. Malvidin

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.