

Activity of *Cedrus libani* against Herpes through deactivation of Herpes virus fusion regulator complex gH-GI (3M1C)

Aryaratna Mangaldeep¹, Siba Prasad Parida²

¹aryaratnamangaldeep@gmail.com

²siba.parida@cutm.ac.in

Centurion University of Technology and Management, Odisha, India

Abstract: An in-silico study was performed to determine the activity of *Cedrus libani* against Herpes. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Herpes virus fusion regulator complex gH-GI (3M1C) enzyme. It was found that Carnosic acid helped to prevent Herpes.

Introduction: *Cedrus libani* is known for its medicinal activities. It is traditionally used to treat diseases like arteriosclerosis, water retention, herpes, lymphatic damage, etc.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Pinopsida
Order	Pinales
Family	Pinaceae
Genus	<i>Cedrus</i>
Species	<i>libani</i>

Major phytochemicals present in the plant are:

- Luteolin
- Carnosic acid
- Eugenol
- Salicylic acid

One of the major enzymes required for the survival of the organism causing Herpes is Herpes virus fusion regulator complex gH-GI (3M1C) enzyme. The objective of this work is to find the phytochemical that can deactivate the enzyme, thereby preventing the physiological activity of the organism.