

Activity of *Hypericum mysorensense* against Herpes through deactivation of Herpes Simplex virus type 1 DNA polymerase (2GV9)

Subhakant Khandual¹, Pankaj Meher²

¹18070518045@cutm.ac.in

²pankaj.meher@cutm.ac.in

Centurion University of Technology and Management, Odisha, India

Abstract: An in-silico study was performed to determine the activity of *Hypericum mysorensense* against Herpes. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Herpes Simplex virus type 1 DNA polymerase (2GV9) enzyme. It was found that Ursolic acid and Astaxanthin helped to prevent Herpes.

Introduction: *Hypericum mysorensense* is known for its medicinal activities. *Hypericum mysorensense* has been used to treat wounds and herpes as part of the Ayurvedic system of traditional medicine.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Equisetopsida
Order	Malpighiales
Family	Hypericaceae
Genus	<i>Hypericum</i>
Species	<i>mysorensense</i>

Major phytochemicals present in the plant are:

- Ursolic acid
- Astaxanthin
- Sitosterol
- Astaxanthin

One of the major enzymes required for the survival of the organism causing Herpes is Herpes Simplex virus type 1 DNA polymerase (2GV9) enzyme. The objective of this work is to find the phytochemical that can deactivate the enzyme, thereby preventing the physiological activity of the organism.