

Activity of *Hypericum mysorensense* against Herpes through deactivation of Thymidine Kinase of Herpes Simplex virus (1KIM)

Jyotiranjana Das¹, Pradipta Banerjee²

¹dasjyotiranjana1998@gmail.com

²pradipta.banerjee@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 Thymidine Kinase of Herpes Simplex virus (1KIM) enzyme. It was found that Ursolic acid 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 Thymidine Kinase of Herpes Simplex virus (1KIM) enzyme. The objective of this work is to find the phytochemical that can deactivate the enzyme, thereby preventing the physiological activity of the organism.