

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

Sangita Khuntia¹, Shantanu Bhattacharya²

¹sangitakhuntia1998@gmail.com

²shantanu.bhattacharya@cutm.ac.in

Centurion University of Technology and Management, Odisha, India

Abstract: An in-silico study was performed to determine the activity of *Hypericum hookerianum* 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 Malvidin helped to prevent Herpes.

Introduction: *Hypericum hookerianum* is known for its medicinal activities. It was recommended in the first century by Greek physicians as a diuretic, wound-healer, and treatment for menstrual disorders. It has been used as an anti-inflammatory, anti-bacterial, disinfectant, and a remedy for disorders of the respiratory tract and gall bladder and herpes.

The plant is classified as follows:

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

Major phytochemicals present in the plant are:

- Malvidin
- Salicylic acid
- Ursolic acid
- Astaxanthin

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.