Activity of Hypericum mysorense against Herpes through deactivation of Herpes Simplex virus Type II Protease (1AT3)

Upendra Kumar Nayak[1], Suchismita Acharya[2]

[1]nayakupendra629@gmail.com

[2]suchismita.acharya@cutm.ac.in

Centurion University of Technology and Management, Odisha, India

Abstract: An in-silico study was performed to determine the activity of Hypericum mysorense against Herpes. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Herpes Simplex virus Type II Protease (1AT3) enzyme. It was found that Sitosterol helped to prevent Herpes.

Introduction: Hypericum mysorense is known for its medicinal activities. Hypericum mysorense 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	Hypericum
Species	mysorense

Major phytochemicals present in the plant are:

a. Ursolic acid
b. Astaxanthin
c. Sitosterol
d. Astaxanthin

One of the major enzymes required for the survival of the organism causing Herpes is Herpes Simplex virus Type II Protease (1AT3) enzyme. The objective of this work is to find the phytochemical that can deactivate the enzyme, thereby preventing the physiological activity of the organism.

ISSN: 2395-6216