Activity of Andrographis paniculata against Herpes through deactivation of Herpes virus fusion regulator complex gH-Gl (3M1C)

Padmaja Biswal[1], Siba Prasad Parida[2]

[1]biswalpadmaja972@gmail.com

[2]siba.parida@cutm.ac.in

Centurion University of Technology and Management, Odisha, India

Abstract: An in-silico study was performed to determine the activity of Andrographis paniculata against Herpes. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Herpes virus fusion regulator complex gH-Gl (3M1C) enzyme. It was found that Genistein and Theobromine helped to prevent Herpes.

Introduction: Andrographis paniculata is known for its medicinal activities. A. paniculata has been used in Siddha and Ayurvedic medicine. It is promoted as a dietary supplement for cancer prevention and cure. In the traditional medicine of India, A. paniculata has also been used for jaundice therapy.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophytes
Class	Angiosperms
Order	Lamiales
Family	Acanthaceae
Genus	Andrographis
Species	paniculata

Major phytochemicals present in the plant are:

a. Genistein
b. Daidzein
c. Theobromine
d. Quercetin

One of the major enzymes required for the survival of the organism causing Herpes is Herpes virus fusion regulator complex gH-Gl (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.