

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

Ashutosh Dash¹, Siba Prasad Parida²

¹kunudash3@gmail.com

²siba.parida@cutm.ac.in

Centurion University of Technology and Management, Odisha, India

Abstract: An in-silico study was performed to determine the activity of *Bidens pilosa* 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 Eugenol and Apigenin helped to prevent Herpes.

Introduction: *Bidens pilosa* is known for its medicinal activities. Roots, leaves and seed have been reported to possess antibacterial, antidysenteric, anti-inflammatory, antimicrobial, herpes, antimalarial, diuretic, hepato-protective and hypotensive activities.

The plant is classified as follows:

Kingdom	Plantae
Division	Magnoliophyta
Class	Magnoliopsida
Order	Asterales
Family	Asteraceae
Genus	<i>Bidens</i>
Species	<i>pilosa</i>

Major phytochemicals present in the plant are:

- a. Eugenol
- b. Apigenin
- c. Luteolin
- d. Carnosic acid

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.