

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

Jiten Kumar Sutar¹, Preetha Bhadra²

¹jitensutar1997@gmail.com

²preeta.bhadra@cutm.ac.in

Centurion University of Technology and Management, Odisha, India

Abstract: An in-silico study was performed to determine the activity of *Solanum torvum* 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 Linamarin helped to prevent Herpes.

Introduction: *Solanum torvum* is known for its medicinal activities. Fruit and leaf decoction is used to treat cough, herpes and to treat liver and spleen enlargement.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Solanales
Family	Solanaceae
Genus	<i>Solanum</i>
Species	<i>torvum</i>

Major phytochemicals present in the plant are:

- a. Campesterol
- b. Linamarin
- c. Glutathione
- d. Malvidin

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.