

Activity of *Conyza aegyptica* against Herpes through deactivation of Herpes Simplex virus Type II Protease (1AT3)

Samita Padhi¹, Jyoti Prakash Rath²

¹samita.padhi.1997@gmail.com

²jyotiprakash.rath@cutm.ac.in

Centurion University of Technology and Management, Odisha, India

Abstract: An in-silico study was performed to determine the activity of *Conyza aegyptica* 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 Epicatechin and Limonene helped to prevent Herpes.

Introduction: *Conyza aegyptica* is known for its medicinal activities. The whole plants used to treat herpes, wound, skin diseases and toothache.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Dicotyledonae
Order	Asterales
Family	Asteraceae
Genus	<i>Conyza</i>
Species	<i>aegyptiaca</i>

Major phytochemicals present in the plant are:

- a. Theobromine
- b. Epicatechin
- c. Catechin
- d. Limonene

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.