

Activity of *Atlantia* sp. against Herpes through deactivation of Herpes Simplex virus Type II Protease (1AT3)

Subhrasweta Das¹, Jyoti Prakash Rath²

¹dassubhrasweta17@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 *Atlantia* sp. 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 Gallic acid helped to prevent Herpes.

Introduction: *Atlantia* sp. is known for its medicinal activities. The flowers, fruit and roots are used to cure herpes, jaundice, fever, headache and asthma.

The plant is classified as follows:

Kingdom	Plantae
Division	Magnoliophyta
Class	Magnoliopsida
Order	Sapindales
Family	Rutaceae
Genus	<i>Atalantia</i>
Species	<i>racemosa</i>

Major phytochemicals present in the plant are:

- a. Allicin
- b. Ajoene
- c. Gallic acid
- d. Ellagic acid

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.