

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

Smitanjali Nayak¹, Ranjan Kumar Sahoo²

¹smitanjali64@gmail.com

²ranjan.sahoo@cutm.ac.in

Centurion University of Technology and Management, Odisha, India

Abstract: An in-silico study was performed to determine the activity of *Syzygium aromaticum* 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 Pelargonidin helped to prevent Herpes.

Introduction: *Syzygium aromaticum* is known for its medicinal activities. Traditionally, cloves have been used for centuries in the treatment of vomiting; flatulence; nausea; liver, herpes, bowel and stomach disorders; and as a stimulant for the nerves.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Myrtales
Family	Myrtaceae
Genus	<i>Syzygium</i>
Species	<i>aromaticum</i>

Major phytochemicals present in the plant are:

- a. Lutein
- b. Digoxin
- c. Pelargonidin
- d. Limonene

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.