Activity of Pandanus amaryllifolius against Herpes through deactivation of Herpes virus fusion regulator complex gH-Gl (3M1C)

Jogesh Kumar Nayak[1], Gagan Kumar Panigrahi[2]

[1]jogeshnayak1998@gmail.com

[2]gagan.panigrahi@cutm.ac.in

Centurion University of Technology and Management, Odisha, India

Abstract: An in-silico study was performed to determine the activity of Pandanus amaryllifolius against Herpes. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Herpes virus fusion regulator complex gH-Gl (3M1C) enzyme. It was found that Limonene helped to prevent Herpes.

Introduction: Pandanus amaryllifolius is known for its medicinal activities. The leaves are used in the perfume industry and traditional medicine to treat diseases like cough, asthma, herpes and diarrhea.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Pandanales
Family	Pandanaceae
Genus	Pandanus
Species	amaryllifolius

Major phytochemicals present in the plant are:

a. Ellagic acid
b. Gallic acid
c. Peonidin
d. Limonene

One of the major enzymes required for the survival of the organism causing Herpes is Herpes virus fusion regulator complex gH-Gl (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.

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