Activity of Sorghum bicolor against Herpes through deactivation of Herpes Simplex virus type 1 DNA polymerase (2GV9)

Dushmanta Meher[1], Gyanranjan Mahalik[2]

[1]180705180065@cutm.ac.in

[2]gyanranjan.mahalik@cutm.ac.in

Centurion University of Technology and Management, Odisha, India

Abstract: An in-silico study was performed to determine the activity of Sorghum bicolor against Herpes. Molecular docking using Biovia Discovery Studio was performed to identify the phytochemical responsible to deactivate Herpes Simplex virus type 1 DNA polymerase (2GV9) enzyme. It was found that Limonene helped to prevent Herpes.

Introduction: Sorghum bicolor is known for its medicinal activities. Seed extracts are drunk to treat hepatitis and herpes.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Poales
Family	Poaceae
Genus	Sorghum
Species	bicolor

Major phytochemicals present in the plant are:

a. Naringin
b. Limonene
c. Naringin
d. Pelargonidin

One of the major enzymes required for the survival of the organism causing Herpes is Herpes Simplex virus type 1 DNA polymerase (2GV9) enzyme. The objective of this work is to find the phytochemical that can deactivate the enzyme, thereby preventing the physiological activity of the organism.

ISSN: 2395-6216