# Activity of Strobilanthus cusia against Herpes through deactivation of Herpes Simplex virus type 1 DNA polymerase (2GV9)

Chinmayee Naik[1], Gyanranjan Mahalik[2]

[1]chinmayeenaik75@gmail.com

[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 Strobilanthus cusia 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 Tangeretin and Epicatechin helped to prevent Herpes.

**Introduction:** Strobilanthus cusia is known for its medicinal activities. It is used for influenza, herpes, epidemic cerebrospinal meningitis, encephalitis B, viral pneumonia and mumps.

The plant is classified as follows:

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| Kingdom | Plantae |
| Division | Tracheophyta |
| Class | Magnoliopsida |
| Order | Lamiales |
| Family | Acanthaceae |
| Genus | Strobilanthus |
| Species | cusia |

Major phytochemicals present in the plant are:

a. Tangeretin
b. Salicylic acid
c. Epicatechin
d. Catechin

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.


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