

## Activity of *Phyllanthus urinaria* against Herpes through deactivation of Herpes Simplex virus type 1 DNA polymerase (2GV9)

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**Abstract:** An in-silico study was performed to determine the activity of *Phyllanthus urinaria* 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 Ursolic acid helped to prevent Herpes.

**Introduction:** *Phyllanthus urinaria* is known for its medicinal activities. It is used in folk medicine as a cure to treat jaundice, herpes, diabetes, malaria, and liver diseases.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Malpighiales
Family	Phyllanthaceae
Genus	<i>Phyllanthus</i>
Species	<i>urinaria</i>

Major phytochemicals present in the plant are:

- a. Tangeretin
- b. Ursolic acid
- c. Limonene
- d. Naringin

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.