

Activity of *Melia azadirach* 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 *Melia azadirach* 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 Zingiberene helped to prevent Herpes.

Introduction: *Melia azadirach* is known for its medicinal activities. The leaf juice is anthelmintic, antilithic, diuretic, herpes and emmenagogue.

The plant is classified as follows:

Kingdom	Plantae
Division	Magnoliophyta
Class	Magnoliopsida
Order	Sapindales
Family	Meliaceae
Genus	<i>Melia</i>
Species	<i>azedarach</i>

Major phytochemicals present in the plant are:

- a. Zingiberene
- b. Ursolic acid
- c. Astaxanthin
- d. Digoxin

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.