

Activity of *Moringa oleifera* 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 *Moringa oleifera* 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 Lycopene helped to prevent Herpes.

Introduction: *Moringa oleifera* is known for its medicinal activities. Various parts of this plant such as the leaves, roots, seed, bark, fruit, flowers and immature pods act as cardiac and circulatory stimulants, possess antitumor, antipyretic, antiepileptic, antiinflammatory, herpes, antiulcer, antispasmodic, diuretic, antihypertensive, cholesterol lowering.

The plant is classified as follows:

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Brassicales
Family	Moringaceae
Genus	<i>Moringa</i>
Species	<i>oleifera</i>

Major phytochemicals present in the plant are:

- Isorhamnetin
- Rosmarinic acid
- Lutein
- Lycopene

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.